

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092018\  
 Data File : VL032507.D  
 Acq On : 20 Sep 2018 13:32  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Sep 21 02:23:07 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 21:33:46 2018  
 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   | 1536436  | 10.00 | ppbv  | -0.01    |
| 33) 1,4-Difluorobenzene | 7.33  | 114  | 3583045  | 10.00 | ppbv  | -0.02    |
| 55) Chlorobenzene-d5    | 12.28 | 117  | 4512265  | 10.00 | ppbv  | -0.02    |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.61  | 95    | 2781272  | 8.30     | ppbv | -0.02  |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 83.00% |

| Target Compounds               |      |     |         |        | Ovalue     |
|--------------------------------|------|-----|---------|--------|------------|
| 2) Dichlorodifluoromethane     | 3.10 | 85  | 1233609 | 6.277  | ppbv 99    |
| 3) Chlorodifluoromethane       | 3.03 | 51  | 1163539 | 8.366  | ppbv 100   |
| 4) Chloromethane               | 3.19 | 50  | 690912  | 8.204  | ppbv 100   |
| 5) Vinyl Chloride              | 3.31 | 62  | 656489  | 7.898  | ppbv 97    |
| 6) Bromomethane                | 3.54 | 94  | 405548  | 9.295  | ppbv 98    |
| 7) Chloroethane                | 3.62 | 64  | 261640  | 9.094  | ppbv 100   |
| 8) Dichlorotetrafluoroethane   | 3.24 | 85  | 1410569 | 8.087  | ppbv 98    |
| 9) Propene                     | 3.06 | 41  | 561545  | 10.009 | ppbv 99    |
| 10) Heptane                    | 8.28 | 43  | 2167899 | 10.771 | ppbv 99    |
| 11) Trichlorofluoromethane     | 4.03 | 101 | 1500259 | 8.466  | ppbv 98    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.58 | 101 | 1258611 | 10.481 | ppbv 99    |
| 13) Ethanol                    | 3.68 | 45  | 144686  | 8.273  | ppbv 99    |
| 14) Bromoethene                | 3.81 | 108 | 490427  | 9.639  | ppbv 99    |
| 15) Acetone                    | 3.93 | 43  | 1213309 | 8.769  | ppbv 99    |
| 16) 1,3-Butadiene              | 3.39 | 39  | 524437  | 8.055  | ppbv 99    |
| 17) tert-Butyl alcohol         | 4.38 | 59  | 228561  | 10.735 | ppbv # 100 |
| 18) 1,1-Dichloroethene         | 4.38 | 96  | 614182  | 11.191 | ppbv 99    |
| 19) Isopropyl Alcohol          | 4.05 | 45  | 925463  | 10.196 | ppbv # 97  |
| 20) Methylene Chloride         | 4.44 | 84  | 541222  | 10.259 | ppbv 99    |
| 21) Allyl Chloride             | 4.51 | 41  | 1089772 | 11.859 | ppbv 99    |
| 22) trans-1,2-Dichloroethene   | 4.99 | 96  | 598355  | 10.048 | ppbv 98    |
| 23) Vinyl Acetate              | 5.18 | 43  | 2681538 | 11.692 | ppbv 99    |
| 24) 1,1-Dichloroethane         | 5.12 | 63  | 1872262 | 9.908  | ppbv 99    |
| 25) Ethyl Acetate              | 5.80 | 43  | 3245231 | 9.932  | ppbv 100   |
| 26) Hexane                     | 5.81 | 57  | 1481661 | 10.127 | ppbv 98    |
| 27) Carbon Disulfide           | 4.65 | 76  | 1608095 | 11.907 | ppbv 99    |
| 28) Methyl tert-Butyl Ether    | 5.14 | 73  | 2095331 | 11.665 | ppbv 99    |
| 29) Chloroform                 | 5.88 | 83  | 2151729 | 9.646  | ppbv 100   |
| 30) Cyclohexane                | 7.28 | 84  | 1310773 | 12.236 | ppbv 100   |
| 31) cis-1,2-Dichloroethene     | 5.67 | 61  | 1437780 | 10.853 | ppbv 99    |
| 32) 1,1,1-Trichloroethane      | 6.65 | 97  | 2268550 | 10.910 | ppbv 98    |
| 34) 2-Butanone                 | 5.36 | 43  | 2147734 | 9.024  | ppbv 99    |
| 35) Carbon Tetrachloride       | 7.17 | 117 | 2211041 | 9.181  | ppbv 99    |
| 36) Benzene                    | 7.04 | 78  | 3181171 | 10.433 | ppbv 98    |
| 37) 1,2-Dichloroethane         | 6.45 | 62  | 1672610 | 8.951  | ppbv 99    |
| 38) Trichloroethene            | 8.00 | 130 | 1108259 | 9.568  | ppbv 99    |
| 39) 1,2-Dichloropropane        | 7.78 | 63  | 1316838 | 10.094 | ppbv 99    |
| 40) 1,4-Dioxane                | 7.99 | 88  | 447141  | 11.424 | ppbv 72    |
| 41) Tetrahydrofuran            | 6.18 | 42  | 1360948 | 10.504 | ppbv 99    |
| 42) Bromodichloromethane       | 7.95 | 83  | 2520405 | 9.779  | ppbv 100   |
| 43) Methyl Methacrylate        | 8.17 | 69  | 1347153 | 10.414 | ppbv 99    |

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

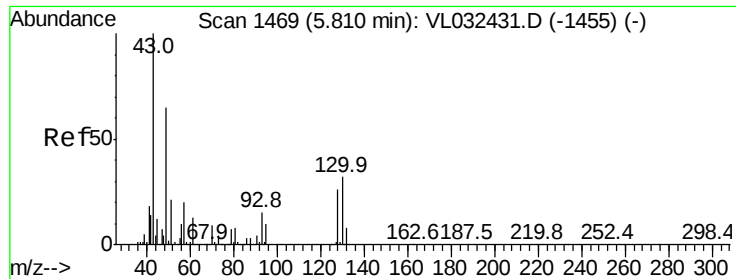
Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Sep 21 02:23:07 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 21:33:46 2018  
 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    | 8.03  | 57   | 5632217  | 9.554  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.45  | 75   | 1886467  | 13.628 | ppbv   | 96       |
| 46) cis-1,3-Dichloropropene   | 8.88  | 75   | 2040377  | 11.535 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.65  | 97   | 1400522  | 10.097 | ppbv   | 98       |
| 48) Dibromochloromethane      | 10.49 | 129  | 2311675  | 12.034 | ppbv   | 100      |
| 49) Bromoform                 | 13.24 | 173  | 1774927  | 10.630 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.90  | 43   | 3510673  | 9.792  | ppbv   | 99       |
| 51) 2-Hexanone                | 10.31 | 43   | 3107418  | 13.456 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.41 | 164  | 1003041  | 10.609 | ppbv   | 98       |
| 53) Toluene                   | 9.98  | 91   | 3983796  | 12.499 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.80 | 107  | 2120678  | 11.387 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.32 | 131  | 1523517  | 7.489  | ppbv # | 61       |
| 57) Chlorobenzene             | 12.34 | 112  | 2726081  | 7.559  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.90 | 91   | 4935822  | 9.141  | ppbv   | 99       |
| 59) m/p-Xylene                | 13.19 | 91   | 4144570  | 8.609  | ppbv # | 35       |
| 60) o-Xylene                  | 13.89 | 91   | 3904409  | 8.257  | ppbv   | 100      |
| 61) Styrene                   | 13.72 | 104  | 2993590  | 9.778  | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.87 | 105  | 5571607  | 8.381  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.88 | 83   | 2937075  | 6.947  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.76 | 120  | 1454485  | 8.369  | ppbv   | 99       |
| 65) tert-Butylbenzene         | 16.95 | 119  | 4612733  | 8.052  | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.20 | 91   | 3003454  | 9.412  | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.50 | 105  | 6832306  | 7.931  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.86 | 119  | 5484782  | 8.215  | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.76 | 91   | 6026398  | 7.963  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.66 | 91   | 4386201  | 8.637  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 16.04 | 105  | 4586621  | 8.884  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.20 | 105  | 4348130  | 8.406  | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.97 | 105  | 4347381  | 7.688  | ppbv   | 93       |
| 75) 1,3-Dichlorobenzene       | 17.21 | 146  | 2429194  | 7.240  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.35 | 146  | 2443610  | 7.849  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 18.03 | 146  | 2406961  | 7.435  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.58 | 225  | 1477206  | 12.212 | ppbv   | 100      |
| 79) Naphthalene               | 22.46 | 128  | 4158570  | 9.043  | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.14 | 142  | 1629645  | 13.319 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.18 | 180  | 1985719  | 8.574  | ppbv   | 99       |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.80 min Scan# 889

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampled :

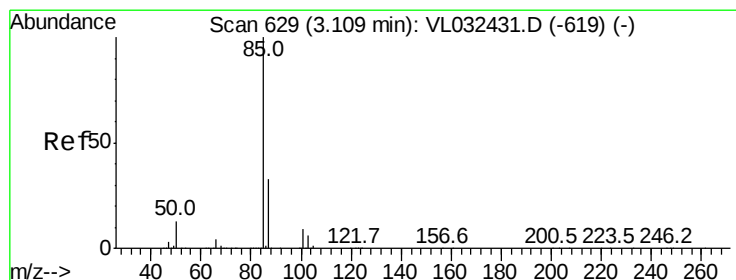
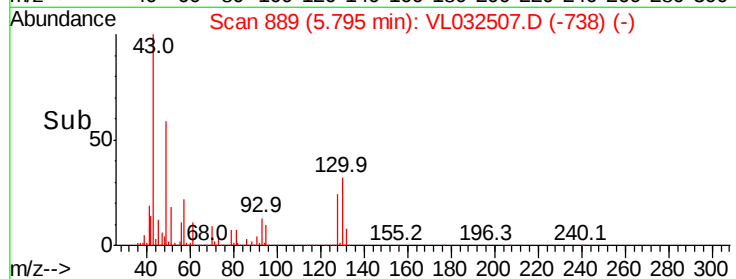
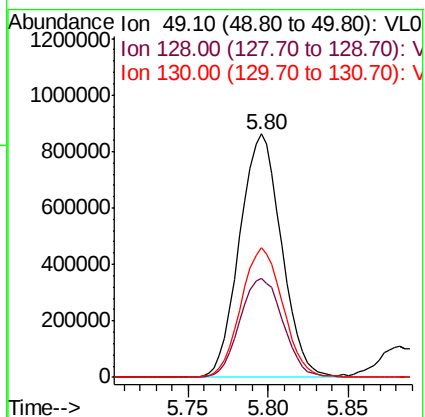
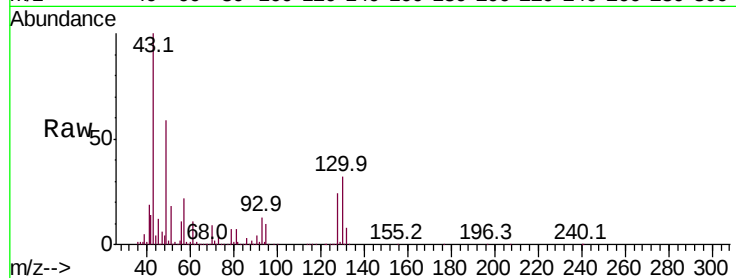
Tot Ion: 49 Resp: 1536436

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 49  | 100   |       |       |
| 128 | 42.2  | 20.7  | 62.1  |
| 130 | 53.7  | 26.6  | 79.7  |

49 100

128 42.2 20.7 62.1

130 53.7 26.6 79.7



#2

Dichlorodifluoromethane

Concen: 6.277 ppbv

RT: 3.10 min Scan# 50

Delta R.T. -0.01 min

Lab File: VL032507.D

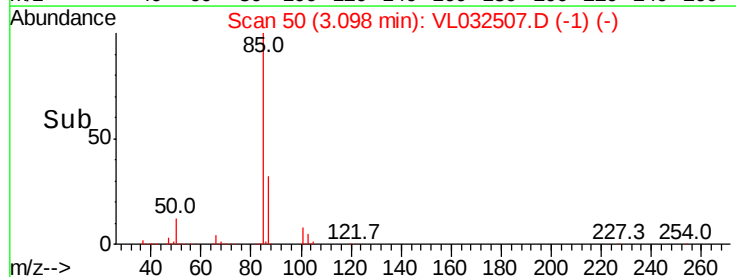
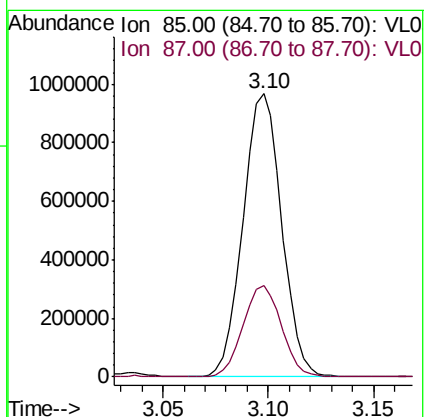
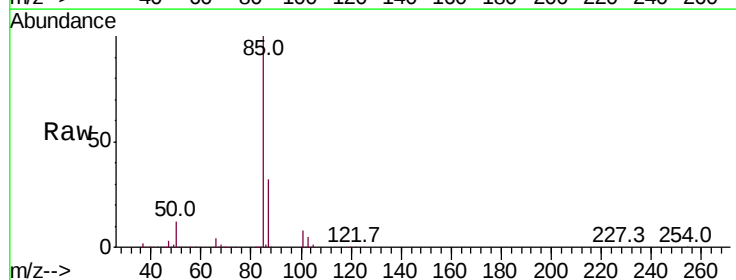
Acq: 20 Sep 2018 13:32

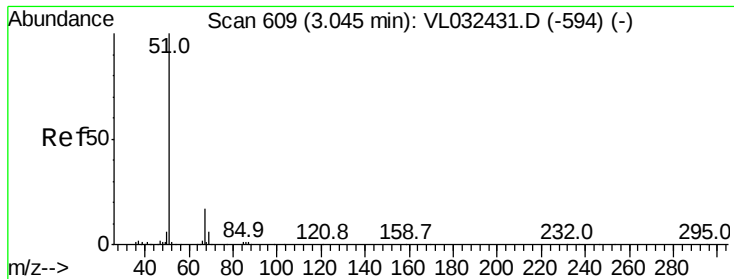
Tgt Ion: 85 Resp: 1233609

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 85  | 100   |       |       |
| 87  | 32.4  | 26.2  | 39.4  |

85 100

87 32.4 26.2 39.4





#3

Chlorodifluoromethane

Concen: 8.366 ppbv

RT: 3.03 min Scan# 30

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

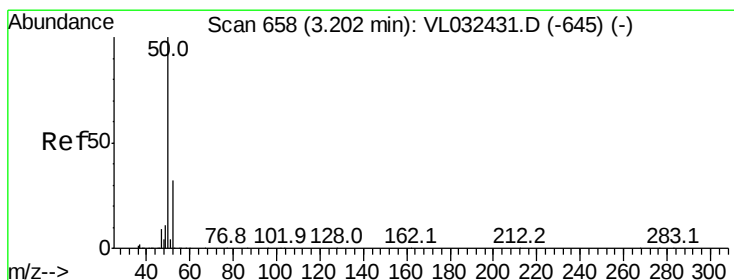
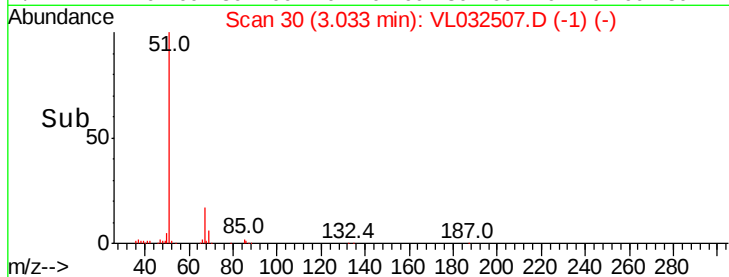
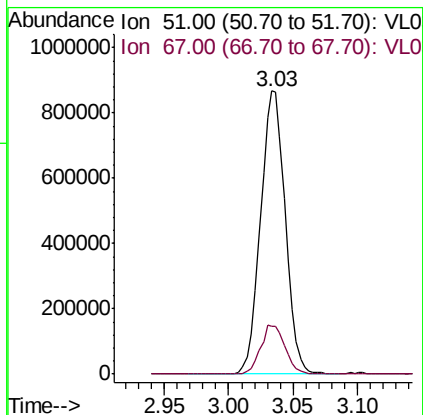
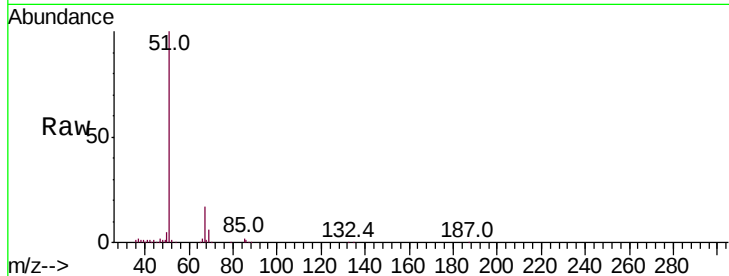
Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 51 Resp: 1163539

Ion Ratio Lower Upper

51 100

67 17.2 13.8 20.8



#4

Chloromethane

Concen: 8.204 ppbv

RT: 3.19 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL032507.D

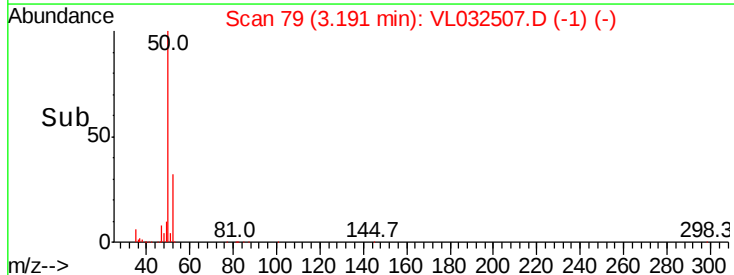
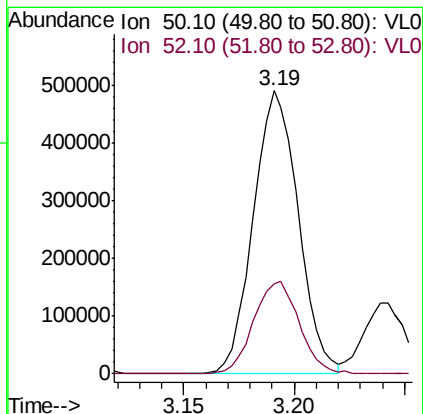
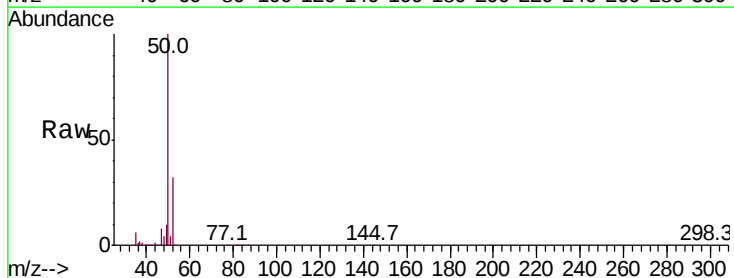
Acq: 20 Sep 2018 13:32

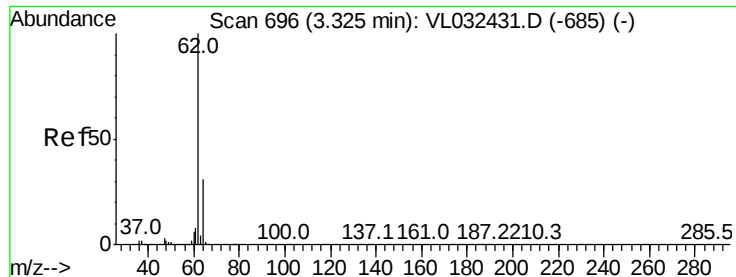
Tgt Ion: 50 Resp: 690912

Ion Ratio Lower Upper

50 100

52 32.0 25.6 38.4





#5

Vinyl Chloride

Concen: 7.898 ppbv

RT: 3.31 min Scan# 117

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

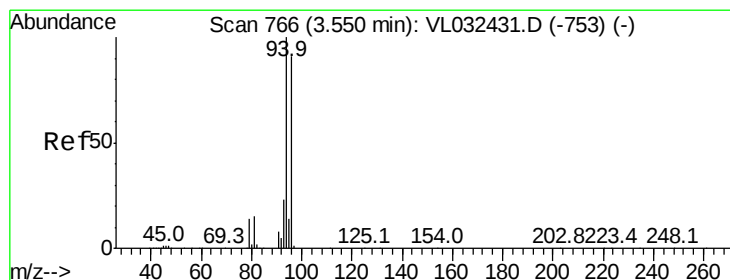
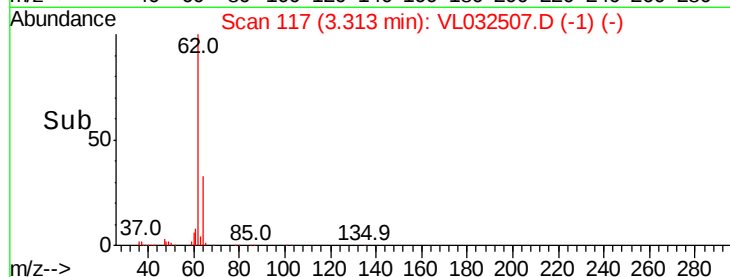
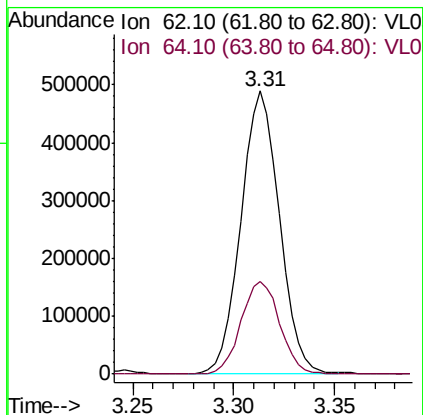
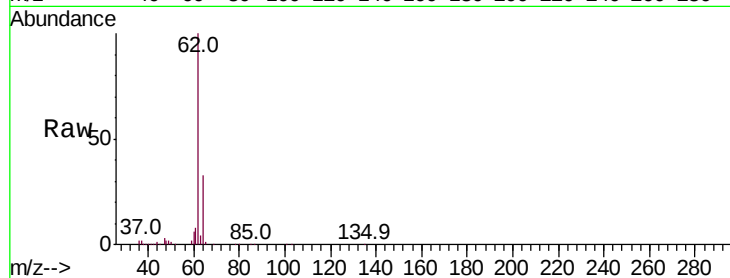
ClientSampleId :

Tot Ion: 62 Resp: 656489

Ion Ratio Lower Upper

62 100

64 32.7 25.0 37.6



#6

Bromomethane

Concen: 9.295 ppbv

RT: 3.54 min Scan# 187

Delta R.T. -0.01 min

Lab File: VL032507.D

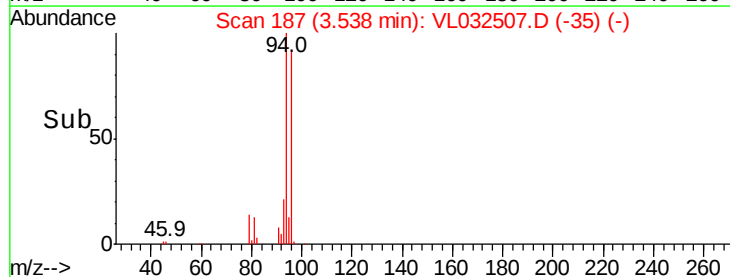
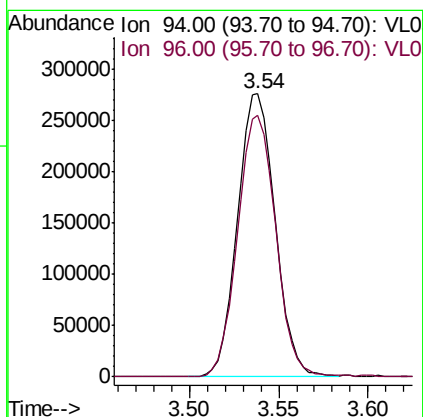
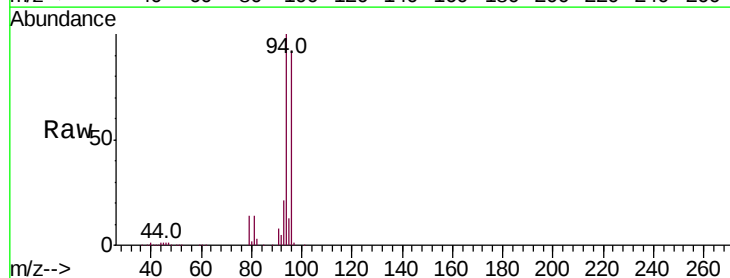
Acq: 20 Sep 2018 13:32

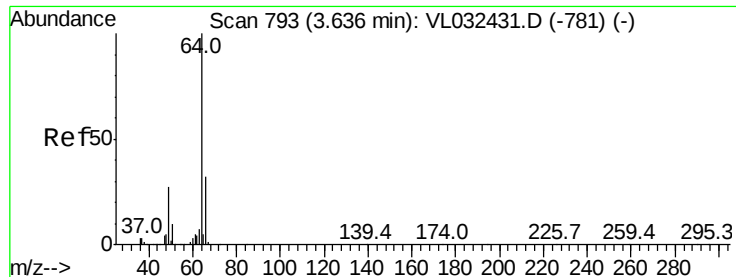
Tgt Ion: 94 Resp: 405548

Ion Ratio Lower Upper

94 100

96 92.5 72.8 109.2





#7

Chloroethane

Concen: 9.094 ppbv

RT: 3.62 min Scan# 213

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

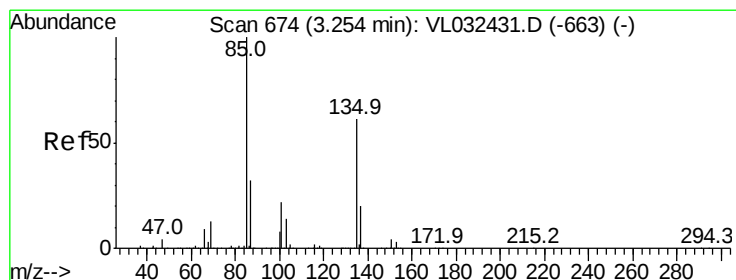
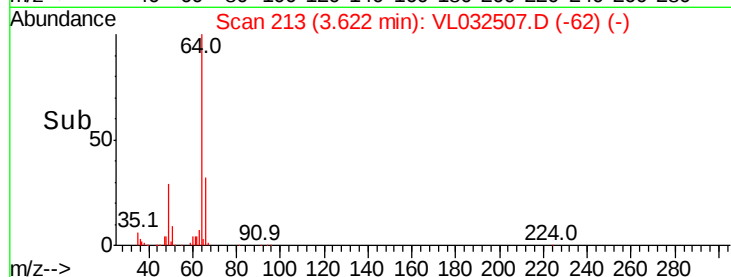
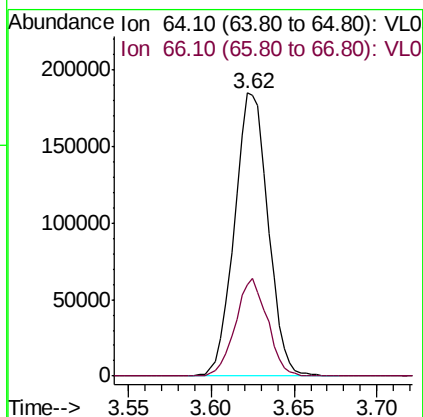
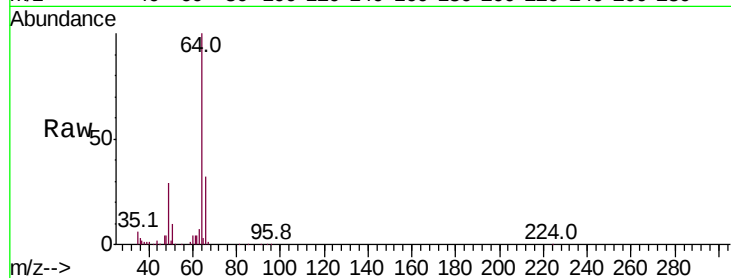
ClientSampled :

Tot Ion: 64 Resp: 261640

Ion Ratio Lower Upper

64 100

66 32.2 25.8 38.6



#8

Dichlorotetrafluoroethane

Concen: 8.087 ppbv

RT: 3.24 min Scan# 95

Delta R.T. -0.01 min

Lab File: VL032507.D

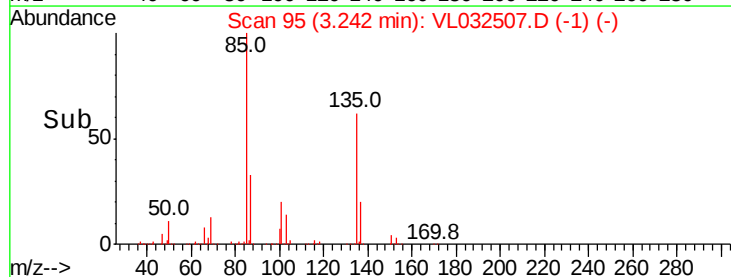
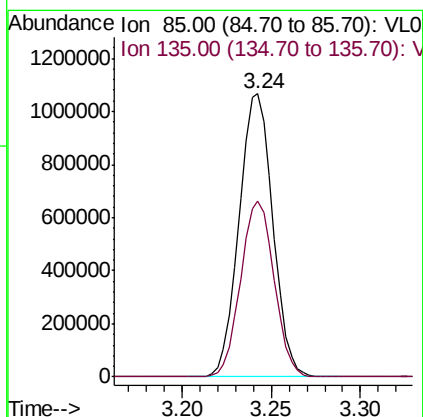
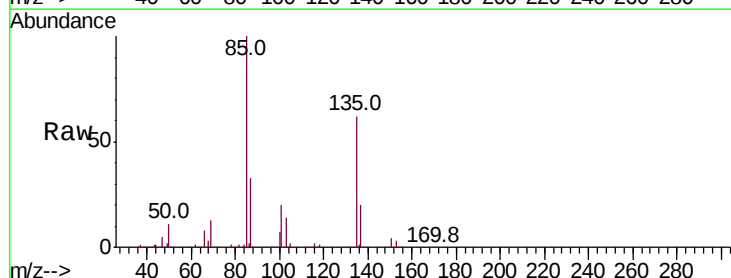
Acq: 20 Sep 2018 13:32

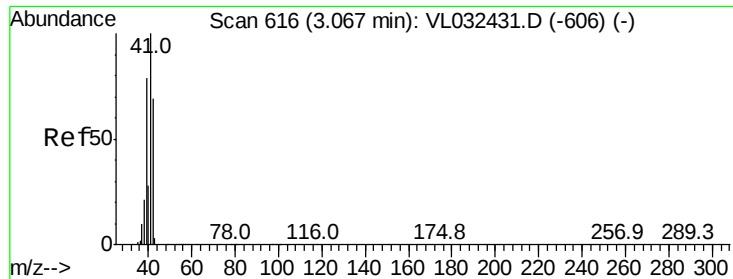
Tgt Ion: 85 Resp: 1410569

Ion Ratio Lower Upper

85 100

135 62.1 48.6 72.8





#9

Propene

Concen: 10.009 ppbv

RT: 3.06 min Scan# 37

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

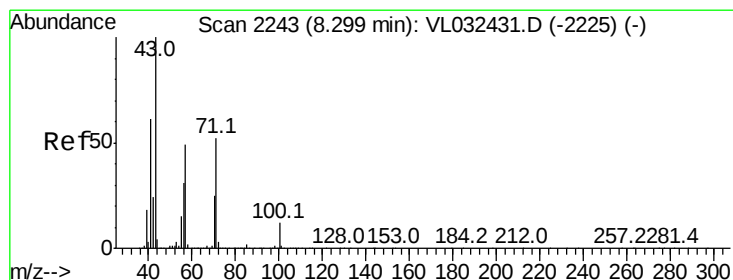
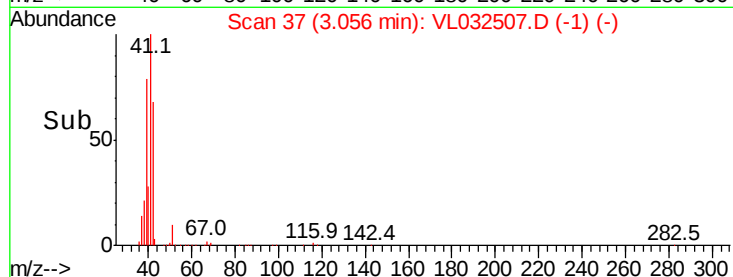
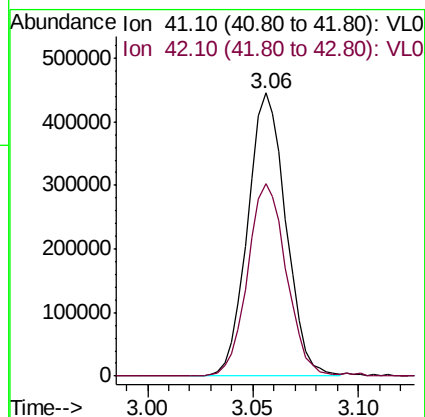
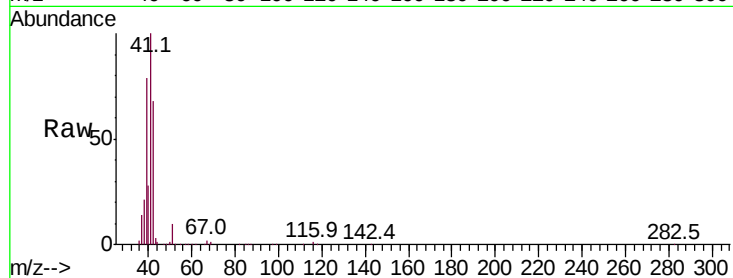
ClientSampleId :

Tot Ion: 41 Resp: 561545

Ion Ratio Lower Upper

41 100

42 69.9 56.6 84.8



#10

Heptane

Concen: 10.771 ppbv

RT: 8.28 min Scan# 1663

Delta R.T. -0.01 min

Lab File: VL032507.D

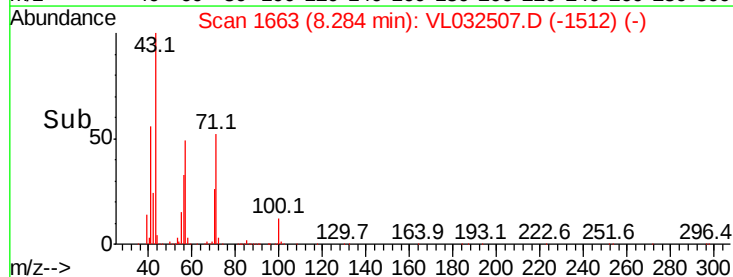
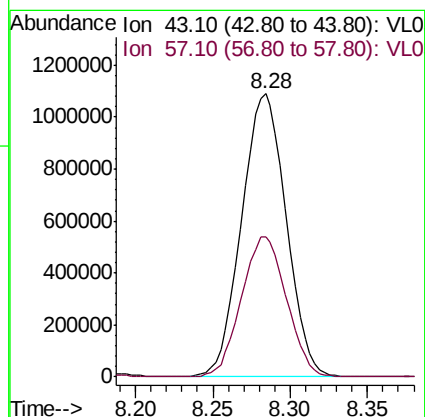
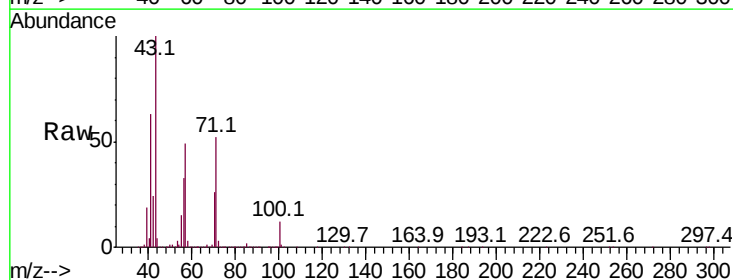
Acq: 20 Sep 2018 13:32

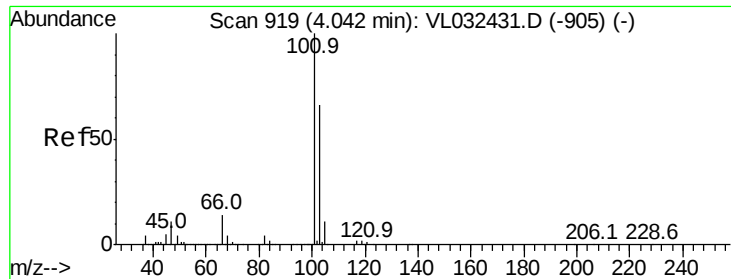
Tgt Ion: 43 Resp: 2167899

Ion Ratio Lower Upper

43 100

57 50.5 39.6 59.4

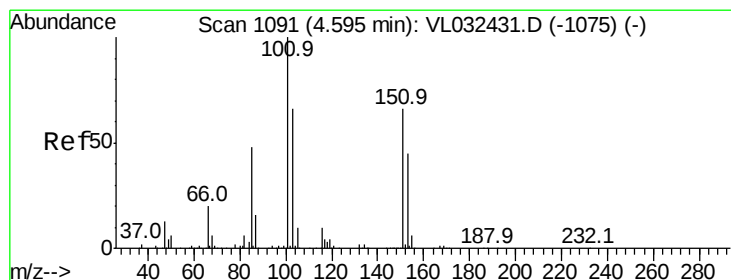
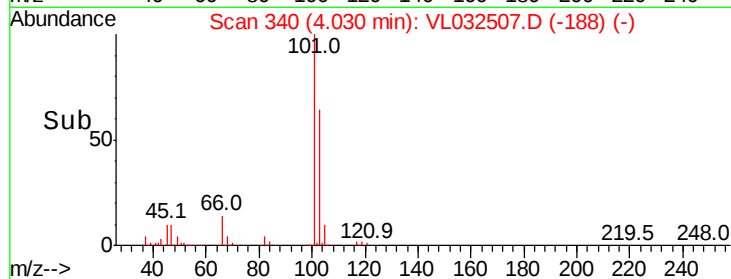
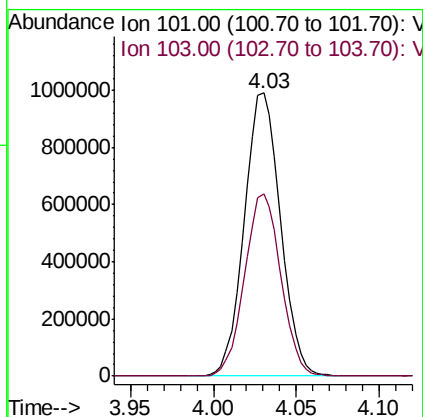
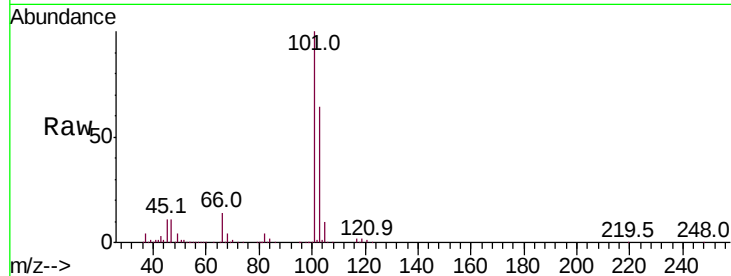




#11  
 Trichlorofluoromethane  
 Concen: 8.466 ppbv  
 RT: 4.03 min Scan# 340  
 Delta R.T. -0.01 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

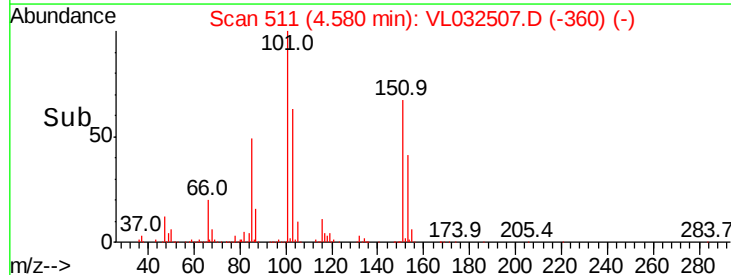
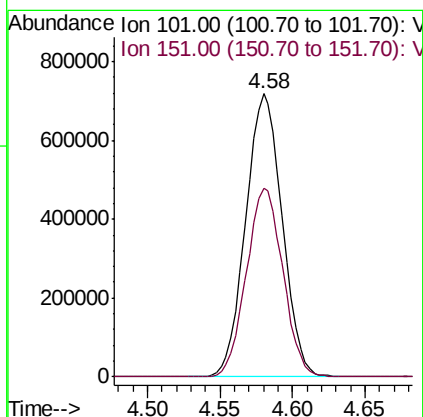
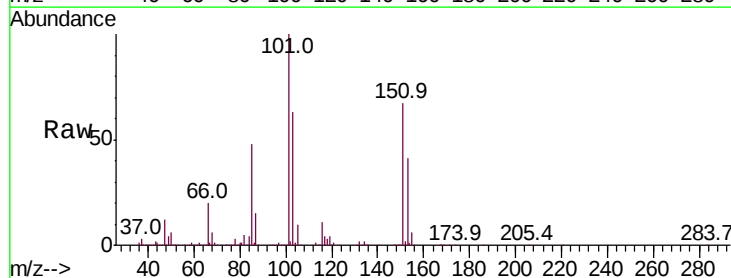
Instrument :  
 MSVOA\_L  
 ClientSampleId :

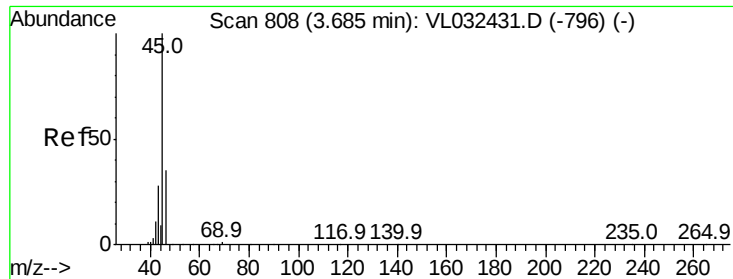
Tot Ion:101 Resp: 1500259  
 Ion Ratio Lower Upper  
 101 100  
 103 64.2 52.8 79.2



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 10.481 ppbv  
 RT: 4.58 min Scan# 511  
 Delta R.T. -0.01 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Tgt Ion:101 Resp: 1258611  
 Ion Ratio Lower Upper  
 101 100  
 151 66.8 52.6 78.8





#13

Ethanol

Concen: 8.273 ppbv

RT: 3.68 min Scan# 230

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

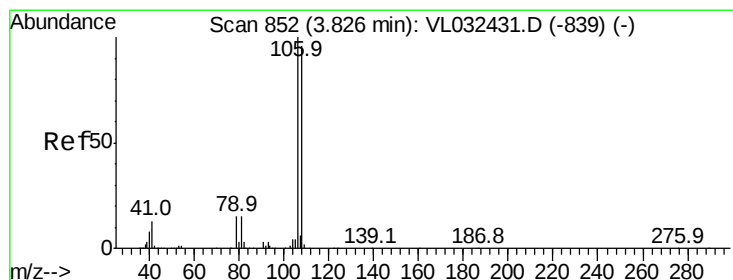
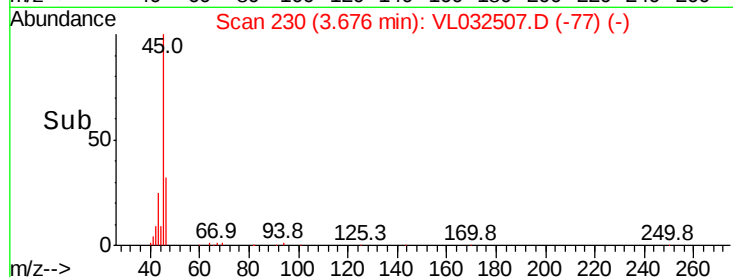
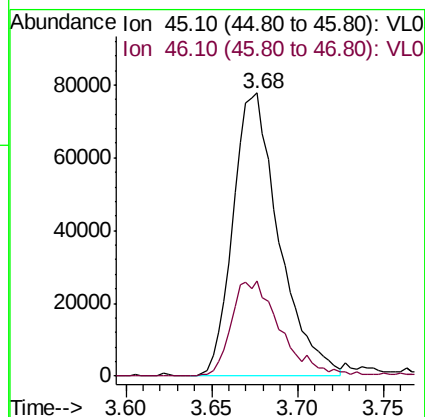
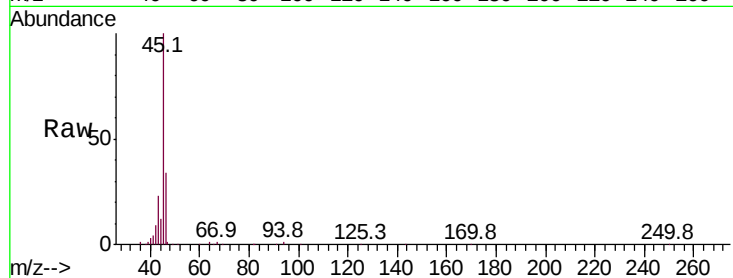
ClientSampleId :

Tot Ion: 45 Resp: 144686

Ion Ratio Lower Upper

45 100

46 36.3 14.2 56.8



#14

Bromoethene

Concen: 9.639 ppbv

RT: 3.81 min Scan# 272

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

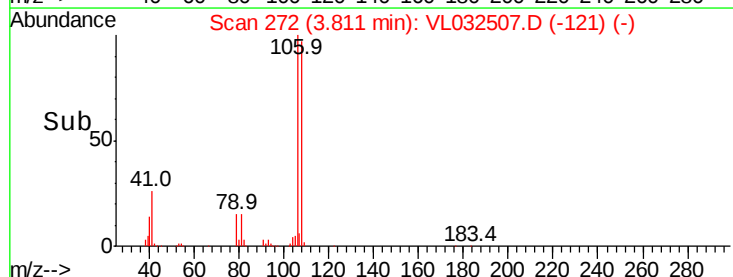
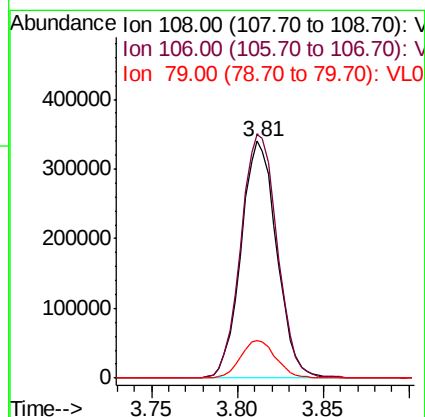
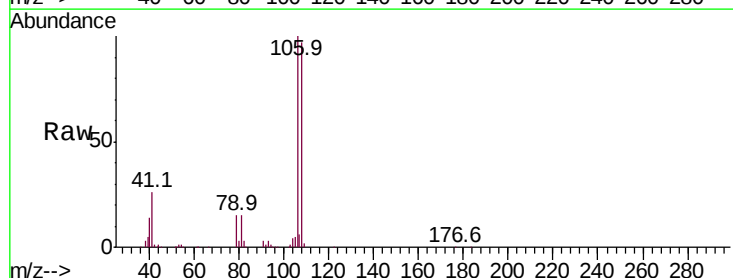
Tgt Ion: 108 Resp: 490427

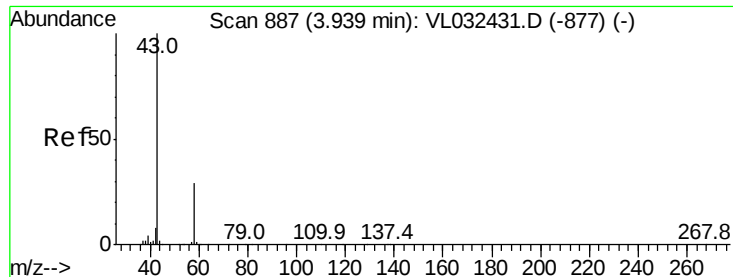
Ion Ratio Lower Upper

108 100

106 105.4 85.5 128.3

79 16.0 13.0 19.6





#15

Acetone

Concen: 8.769 ppbv

RT: 3.93 min Scan# 308

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

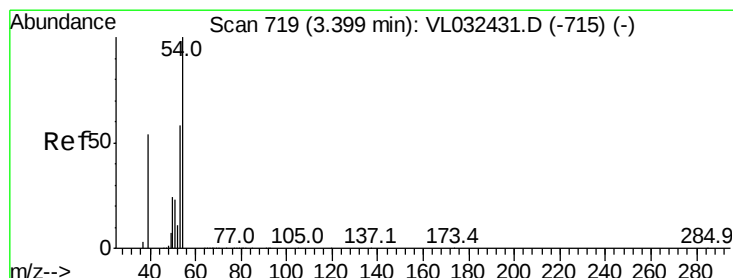
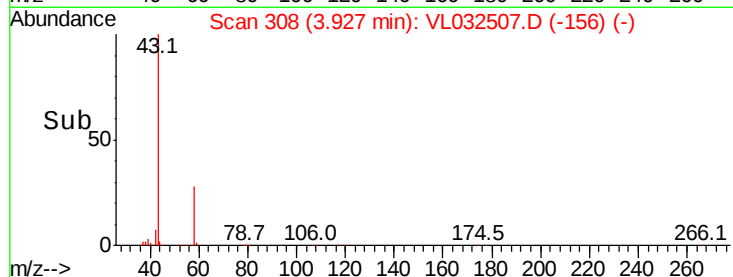
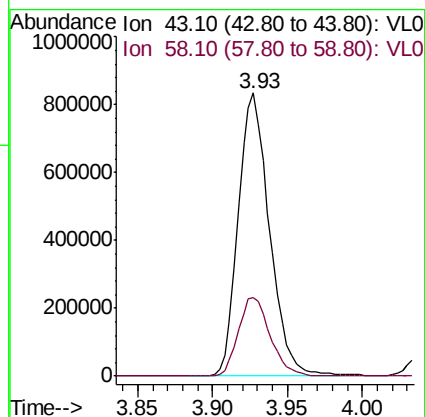
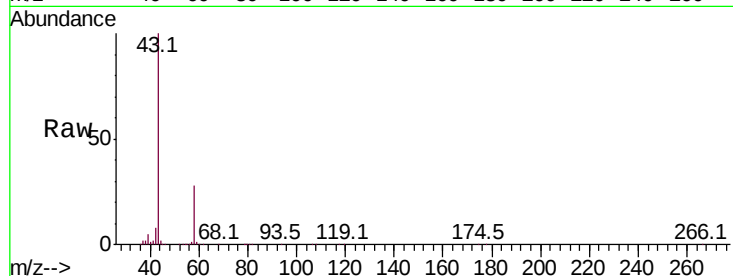
ClientSampleId :

Tot Ion: 43 Resp: 1213309

Ion Ratio Lower Upper

43 100

58 28.6 22.6 33.8



#16

1,3-Butadiene

Concen: 8.055 ppbv

RT: 3.39 min Scan# 140

Delta R.T. -0.01 min

Lab File: VL032507.D

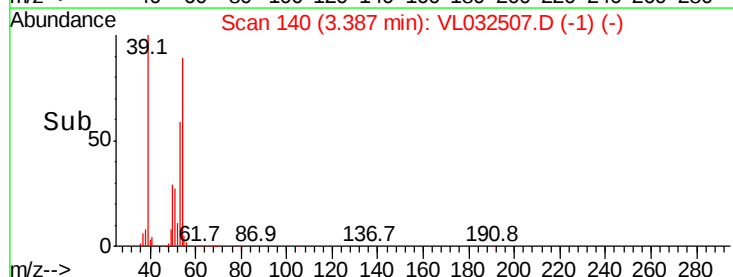
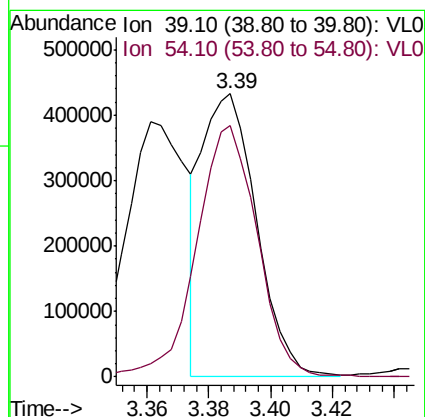
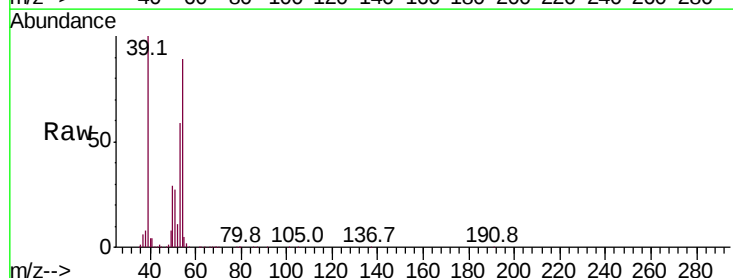
Acq: 20 Sep 2018 13:32

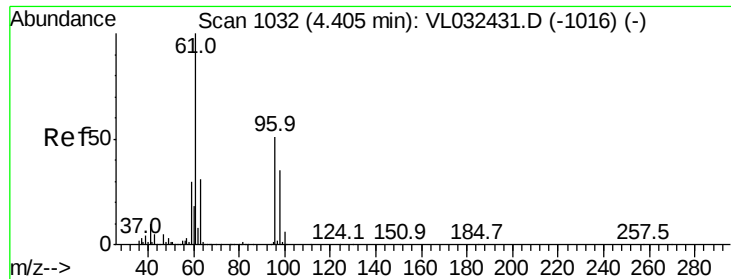
Tgt Ion: 39 Resp: 524437

Ion Ratio Lower Upper

39 100

54 100.4 80.8 121.2





#17

tert-Butyl alcohol

Concen: 10.735 ppbv

RT: 4.38 min Scan# 450

Delta R.T. -0.02 min

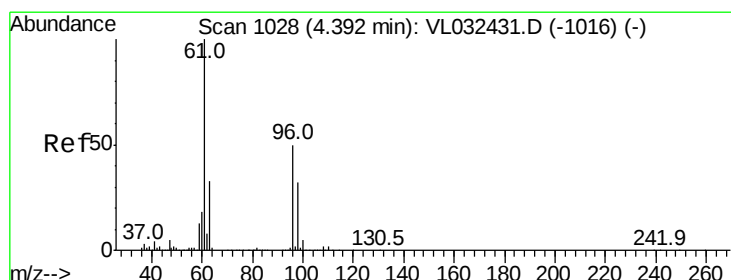
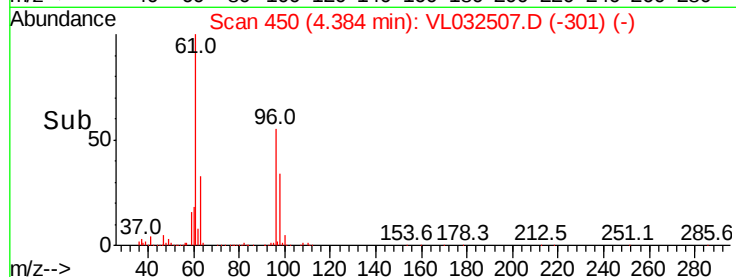
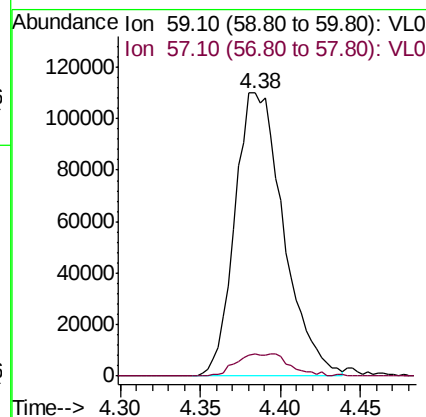
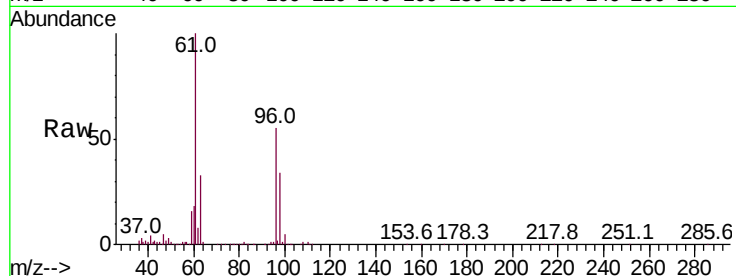
Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 59 Resp: 228561

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 59  | 100   |       |       |
| 57  | 8.9   | 0.0   | 0.0#  |



#18

1,1-Dichloroethene

Concen: 11.191 ppbv

RT: 4.38 min Scan# 448

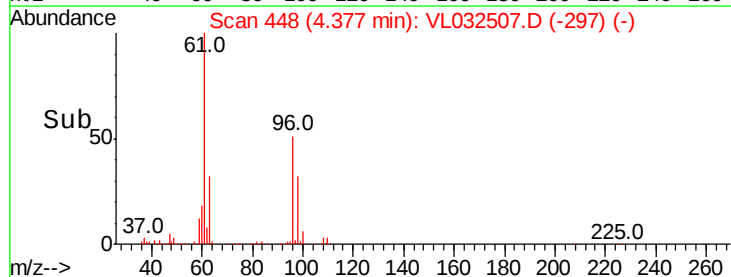
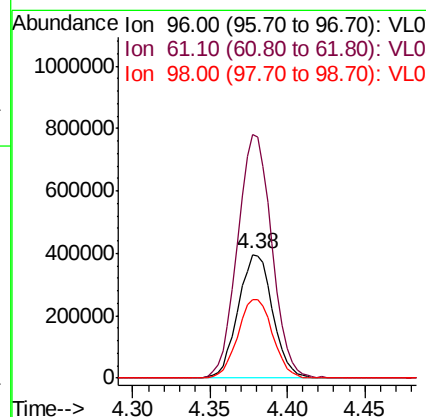
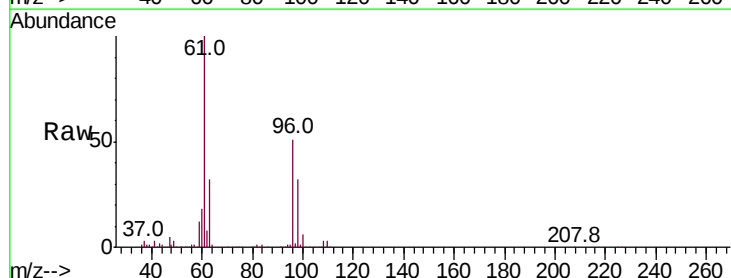
Delta R.T. -0.01 min

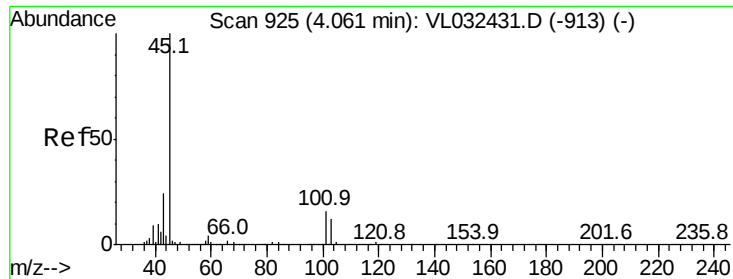
Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Tgt Ion: 96 Resp: 614182

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 96  | 100   |       |       |
| 61  | 197.2 | 159.2 | 238.8 |
| 98  | 63.2  | 51.0  | 76.4  |





#19

Isopropyl Alcohol

Concen: 10.196 ppbv

RT: 4.05 min Scan# 345

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

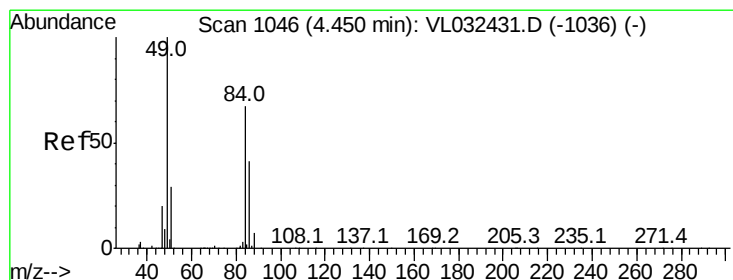
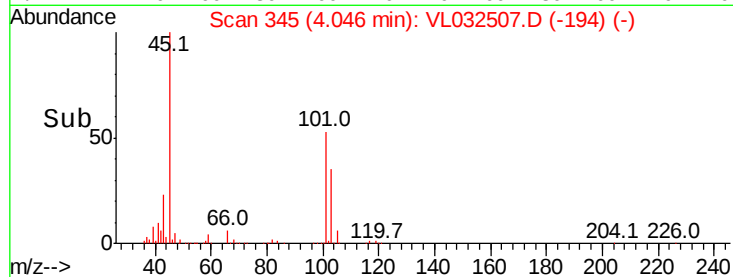
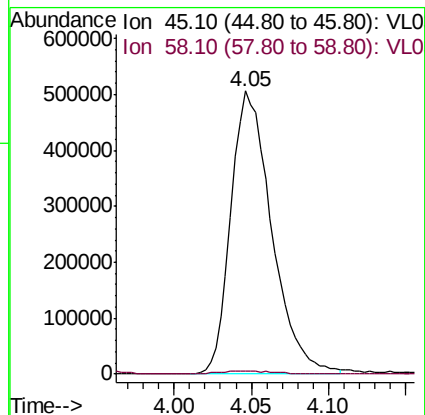
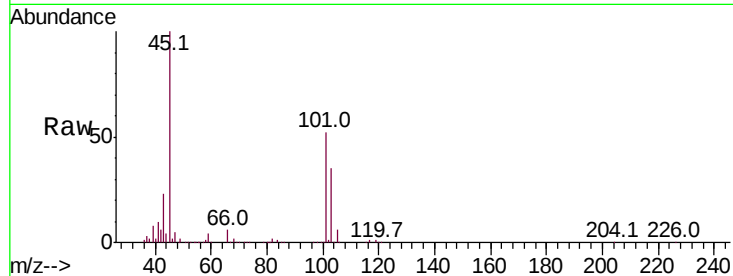
ClientSampleId :

Tot Ion: 45 Resp: 925463

Ion Ratio Lower Upper

45 100

58 1.6 2.0 3.0#



#20

Methylene Chloride

Concen: 10.259 ppbv

RT: 4.44 min Scan# 466

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Tgt Ion: 84 Resp: 541222

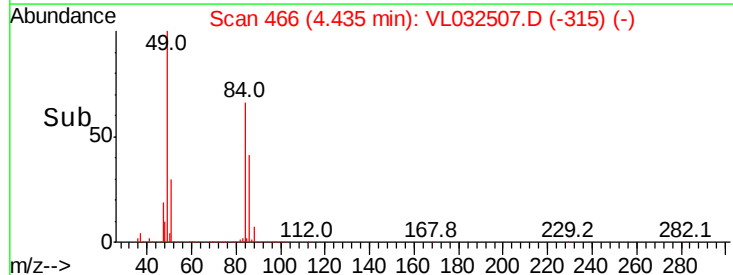
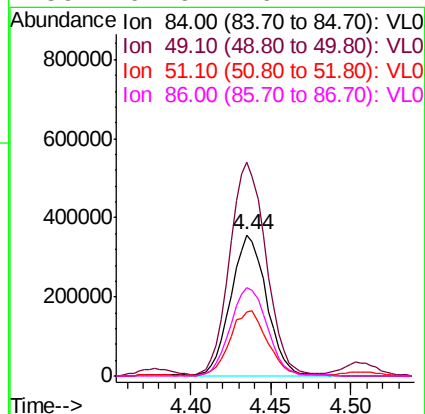
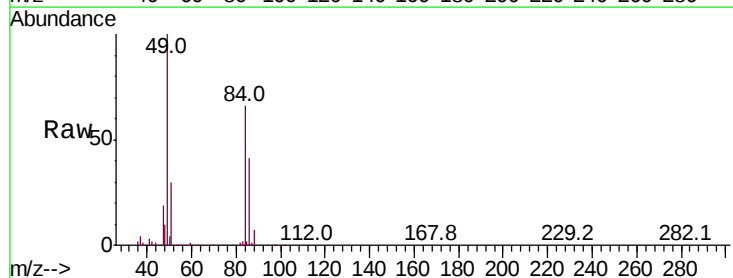
Ion Ratio Lower Upper

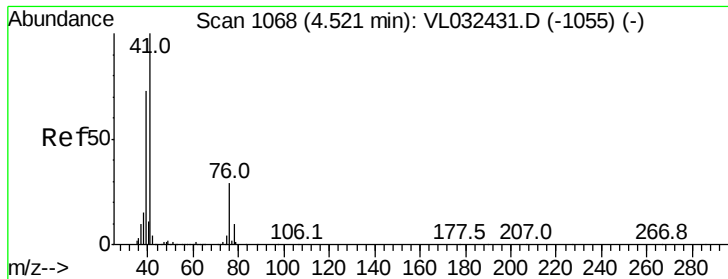
84 100

49 150.8 119.1 178.7

51 44.7 35.2 52.8

86 62.6 49.4 74.2

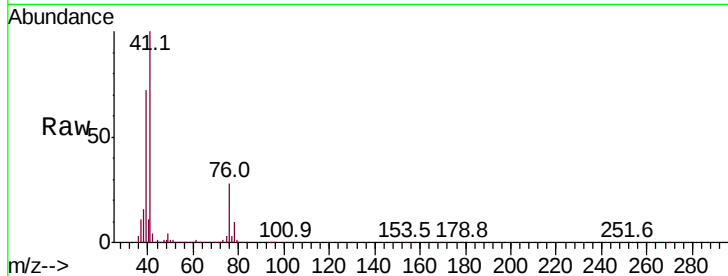




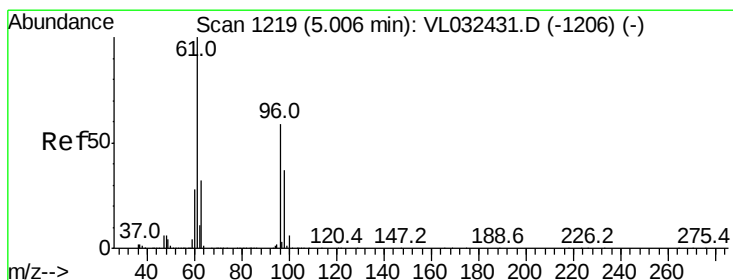
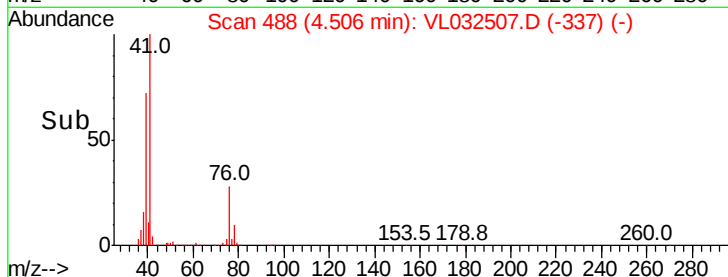
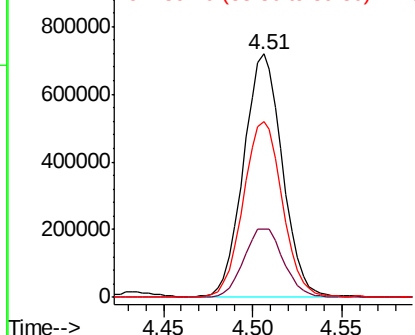
#21  
Allvl Chloride  
Concen: 11.859 ppbv  
RT: 4.51 min Scan# 488  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 41 Resp: 1089772  
Ion Ratio Lower Upper  
41 100  
76 29.1 23.6 35.4  
39 72.8 57.7 86.5

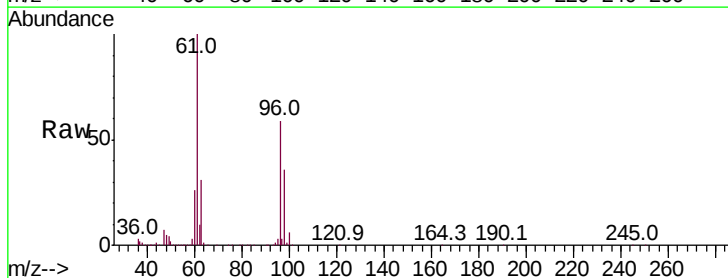


Abundance Ion 41.10 (40.80 to 41.80): VL0  
Ion 76.10 (75.80 to 76.80): VL0  
Ion 39.10 (38.80 to 39.80): VL0

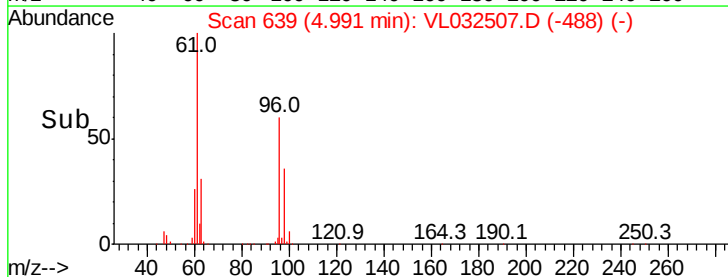
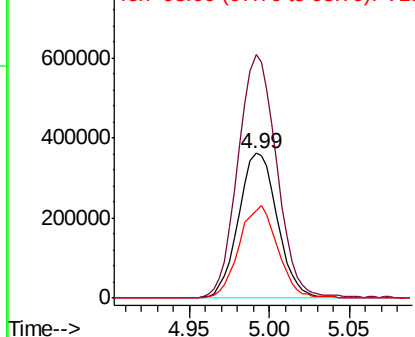


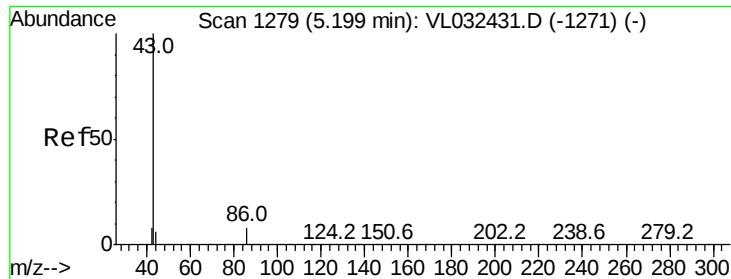
#22  
trans-1,2-Dichloroethene  
Concen: 10.048 ppbv  
RT: 4.99 min Scan# 639  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion: 96 Resp: 598355  
Ion Ratio Lower Upper  
96 100  
61 168.0 136.2 204.4  
98 60.4 50.4 75.6



Abundance Ion 96.00 (95.70 to 96.70): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 98.00 (97.70 to 98.70): VL0



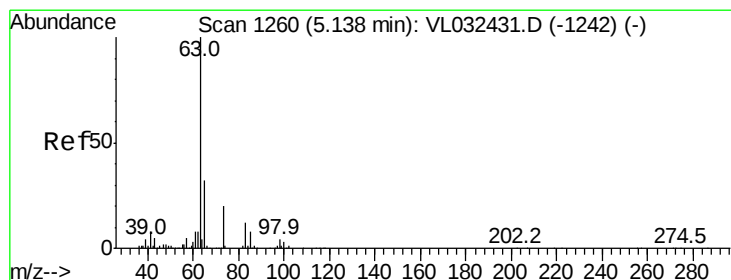
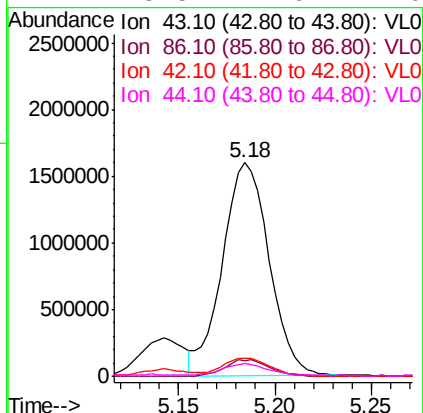
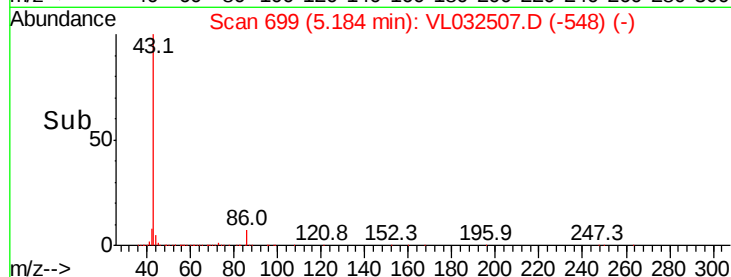
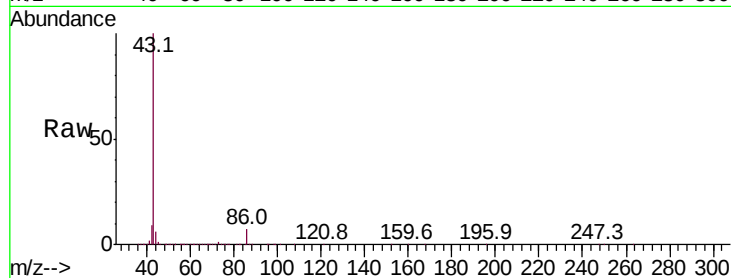


#23  
 Vinyl Acetate  
 Concen: 11.692 ppbv  
 RT: 5.18 min Scan# 699  
 Delta R.T. -0.01 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Tot Ion: 43 Resp: 2681538

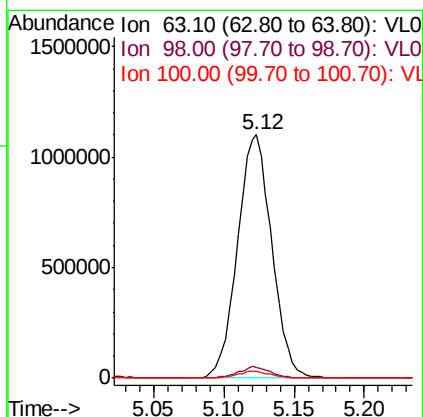
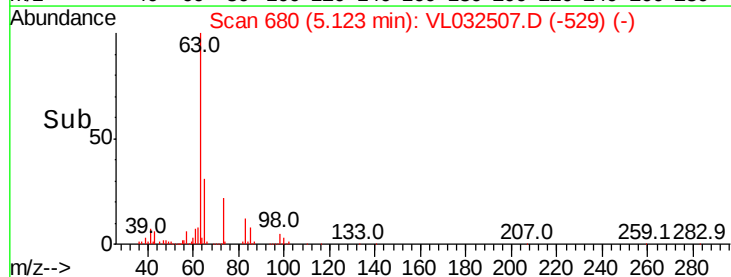
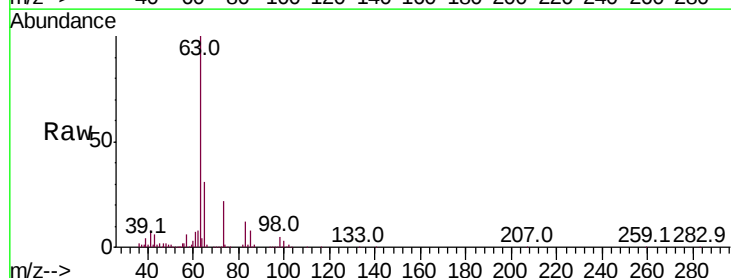
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 86  | 7.1   | 5.9   | 8.9   |
| 42  | 8.4   | 6.9   | 10.3  |
| 44  | 5.5   | 4.6   | 7.0   |

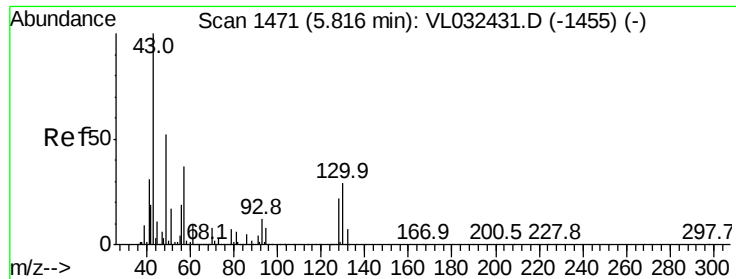


#24  
 1,1-Dichloroethane  
 Concen: 9.908 ppbv  
 RT: 5.12 min Scan# 680  
 Delta R.T. -0.01 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Tgt Ion: 63 Resp: 1872262

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 63  | 100   |       |       |
| 98  | 4.5   | 2.1   | 6.5   |
| 100 | 2.6   | 1.5   | 4.4   |



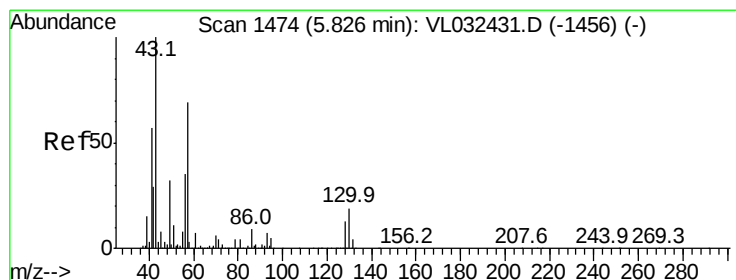
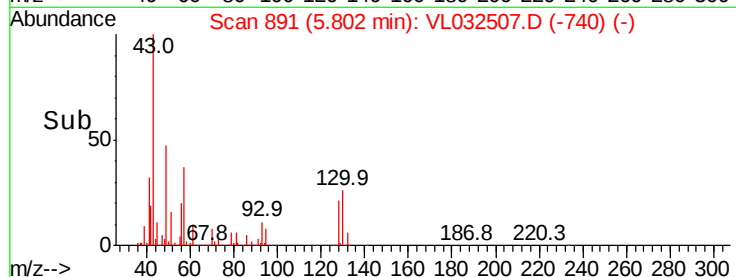
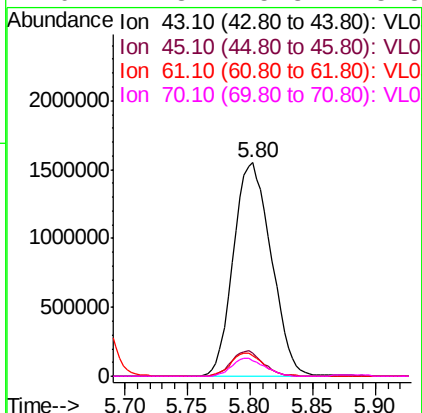
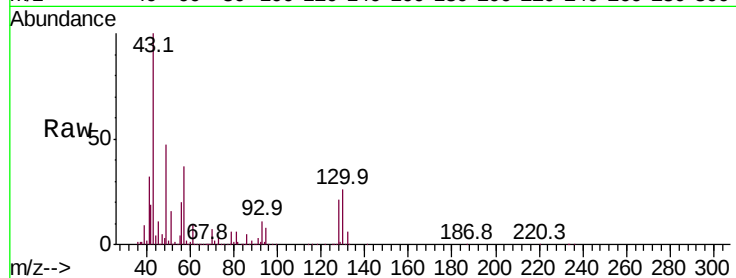


#25  
Ethyl Acetate  
Concen: 9.932 ppbv  
RT: 5.80 min Scan# 891  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 43 Resp: 3245231

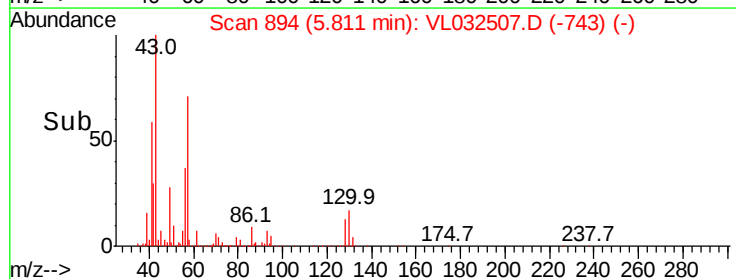
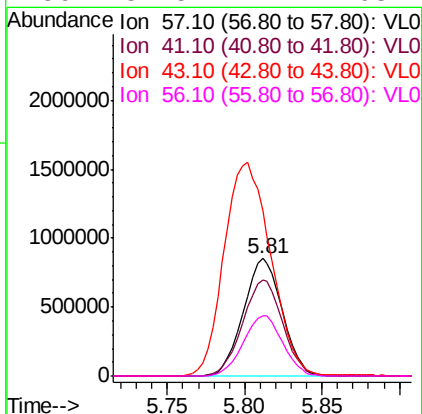
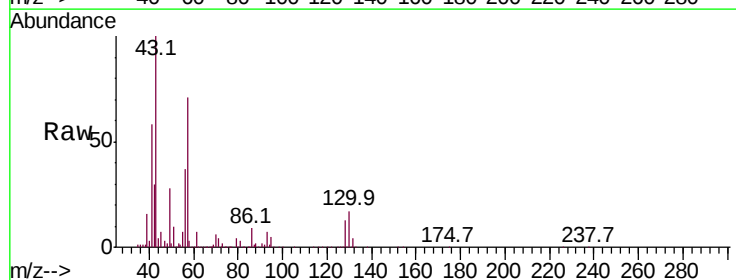
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 45  | 9.9   | 8.0   | 12.0  |
| 61  | 9.3   | 7.6   | 11.4  |
| 70  | 7.3   | 5.8   | 8.8   |

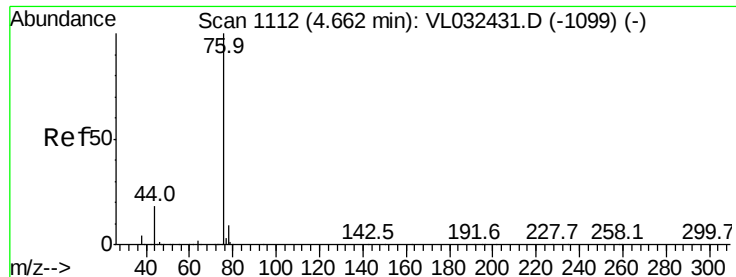


#26  
Hexane  
Concen: 10.127 ppbv  
RT: 5.81 min Scan# 894  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion: 57 Resp: 1481661

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 57  | 100   |       |       |
| 41  | 84.6  | 69.0  | 103.4 |
| 43  | 219.9 | 172.1 | 258.1 |
| 56  | 52.5  | 42.2  | 63.2  |





#27

Carbon Disulfide

Concen: 11.907 ppbv

RT: 4.65 min Scan# 532

Delta R.T. -0.01 min

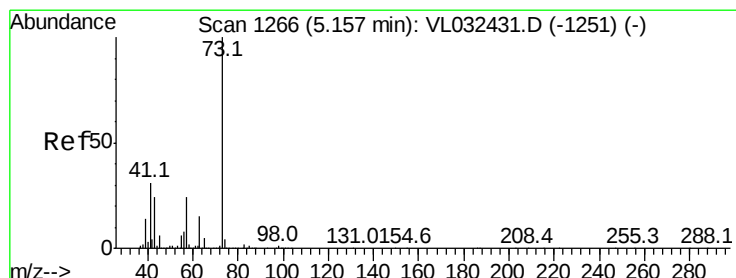
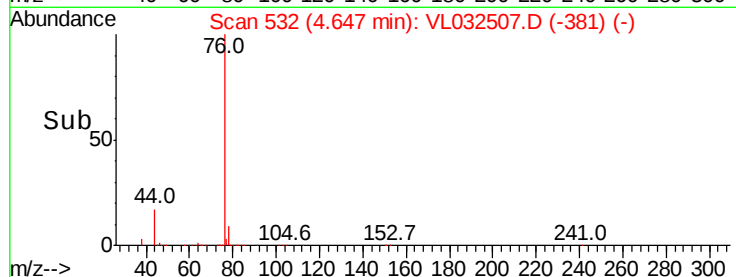
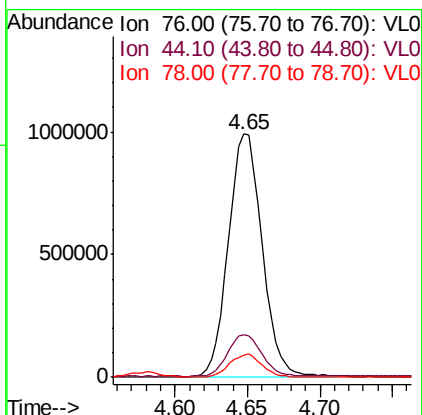
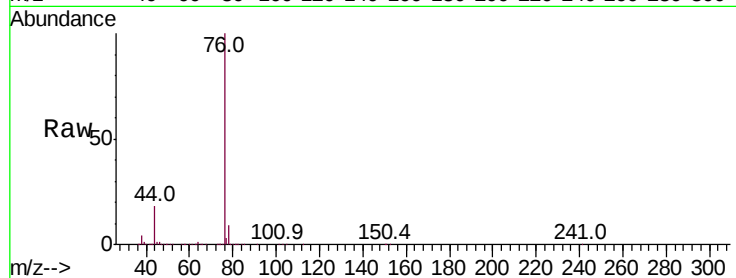
Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :  
MSVOA\_L  
ClientSampled :

Tot Ion: 76 Resp: 1608095

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 76  | 100   |       |       |
| 44  | 17.9  | 14.0  | 21.0  |
| 78  | 9.1   | 7.5   | 11.3  |



#28

Methyl tert-Butyl Ether

Concen: 11.665 ppbv

RT: 5.14 min Scan# 686

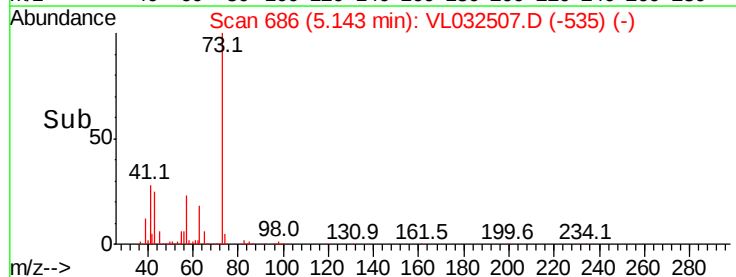
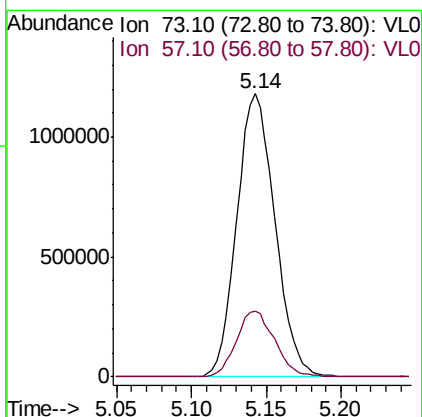
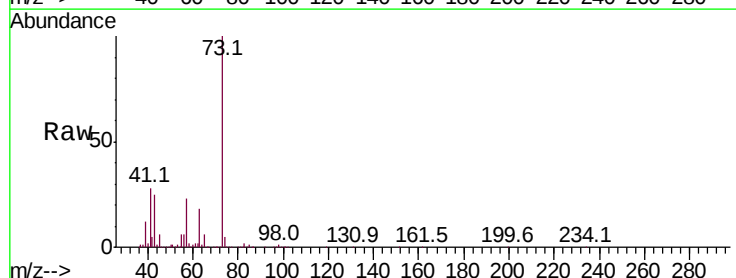
Delta R.T. -0.01 min

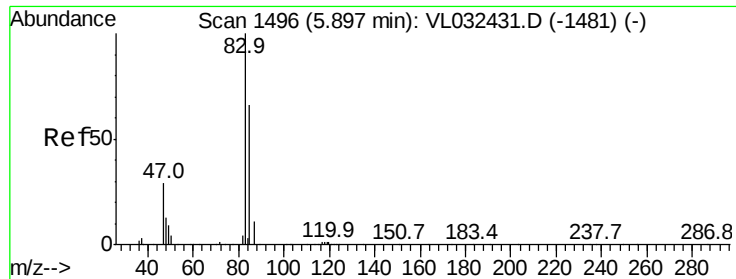
Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Tgt Ion: 73 Resp: 2095331

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





#29

Chloroform

Concen: 9.646 ppbv

RT: 5.88 min Scan# 916

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

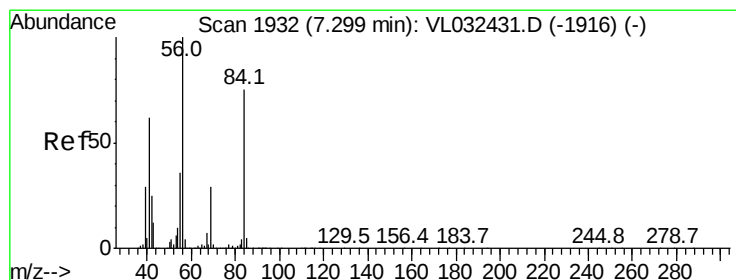
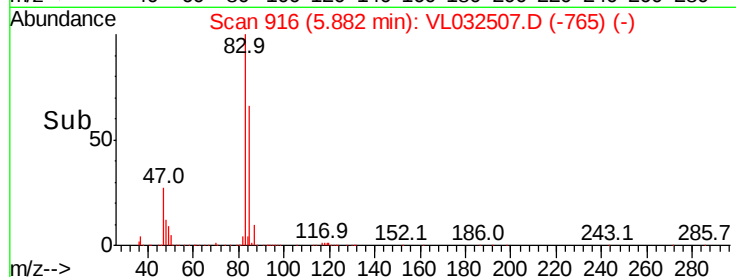
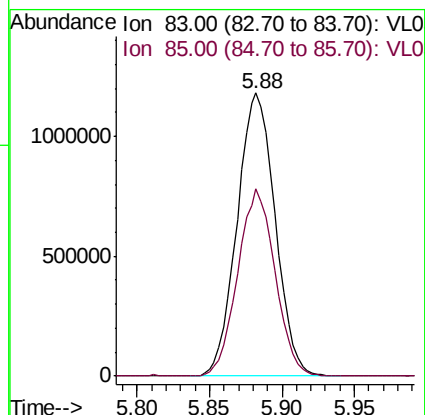
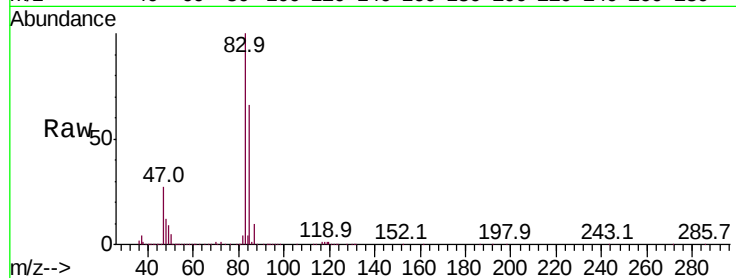
ClientSampleId :

Tot Ion: 83 Resp: 2151729

Ion Ratio Lower Upper

83 100

85 65.9 52.5 78.7



#30

Cyclohexane

Concen: 12.236 ppbv

RT: 7.28 min Scan# 1351

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

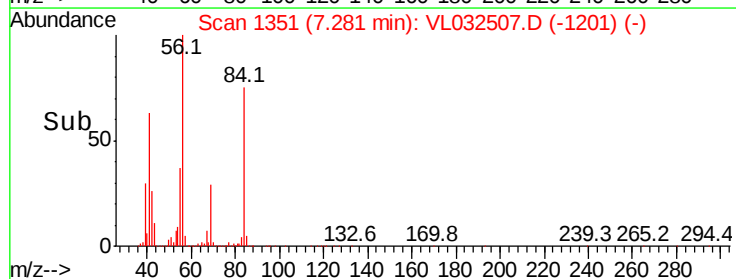
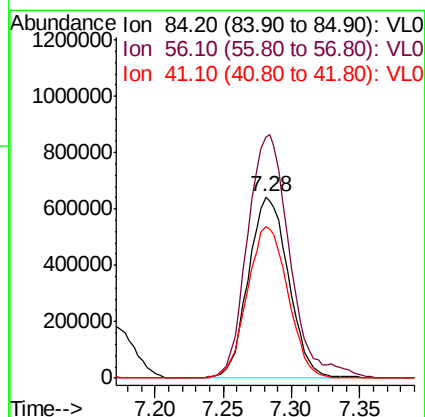
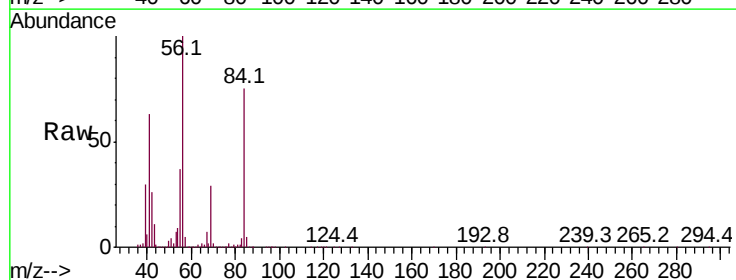
Tgt Ion: 84 Resp: 1310773

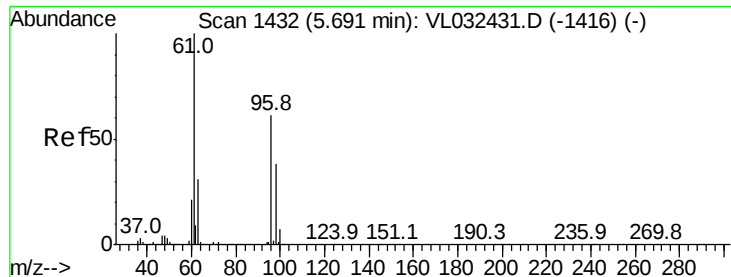
Ion Ratio Lower Upper

84 100

56 142.3 113.5 170.3

41 85.1 68.1 102.1



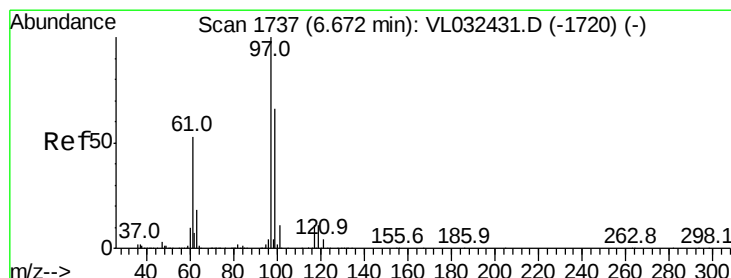
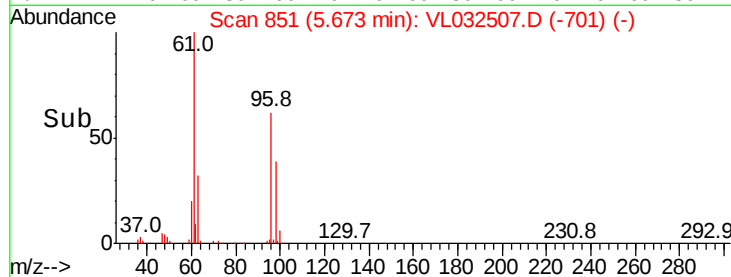
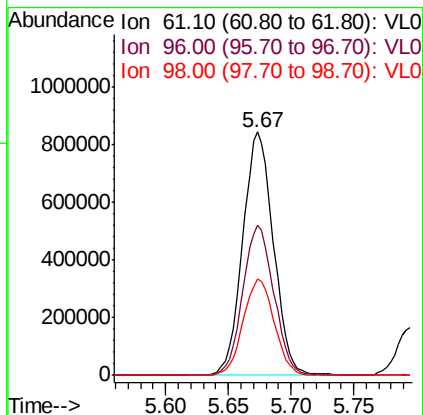
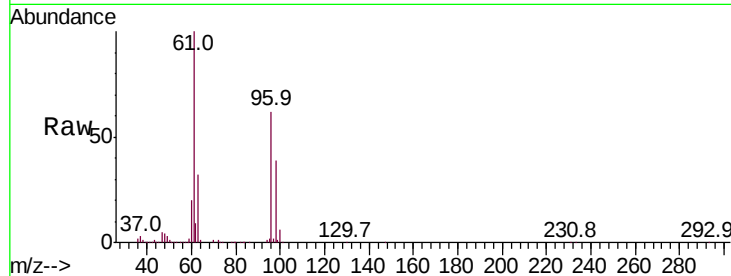


#31

cis-1,2-Dichloroethene  
 Concen: 10.853 ppbv  
 RT: 5.67 min Scan# 851  
 Delta R.T. -0.02 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Instrument :  
 MSVOA\_L  
 ClientSampleId :

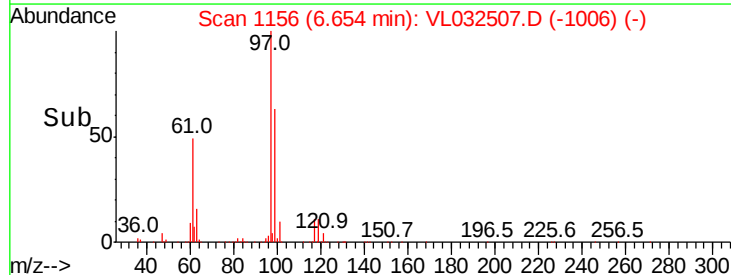
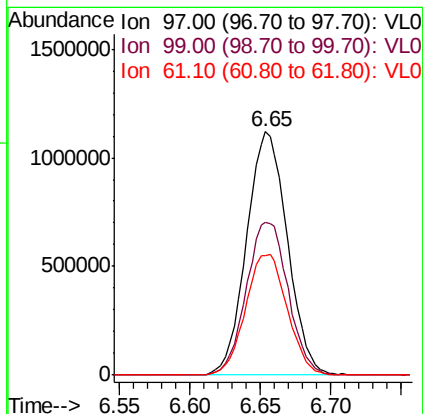
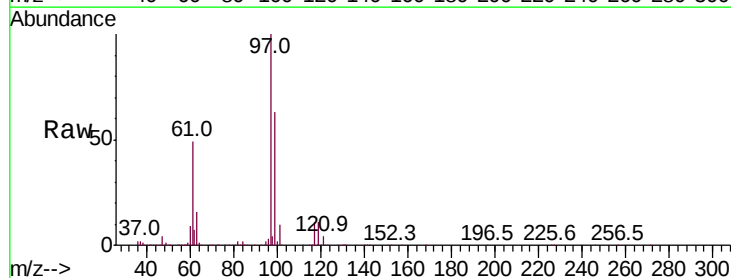
Tot Ion: 61 Resp: 1437780  
 Ion Ratio Lower Upper  
 61 100  
 96 61.7 49.2 73.8  
 98 39.4 30.7 46.1

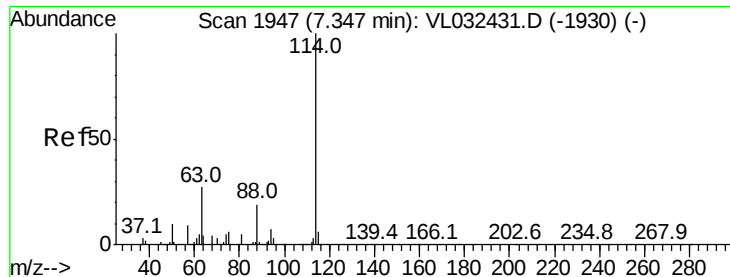


#32

1,1,1-Trichloroethane  
 Concen: 10.910 ppbv  
 RT: 6.65 min Scan# 1156  
 Delta R.T. -0.02 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Tgt Ion: 97 Resp: 2268550  
 Ion Ratio Lower Upper  
 97 100  
 99 64.5 52.1 78.1  
 61 50.8 42.5 63.7





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.33 min Scan# 1366

Delta R.T. -0.02 min

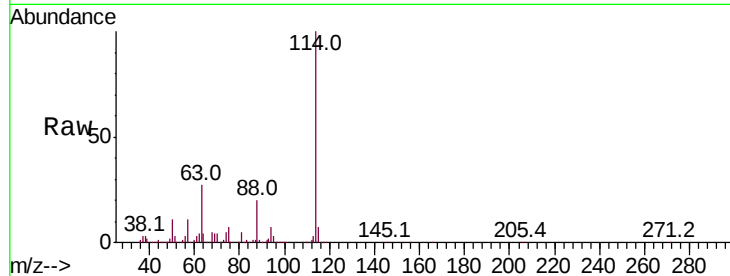
Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion:114 Resp: 3583045

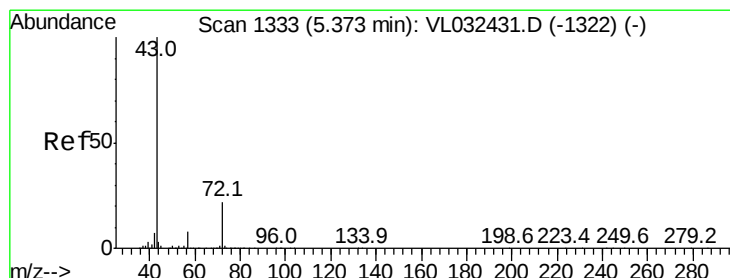
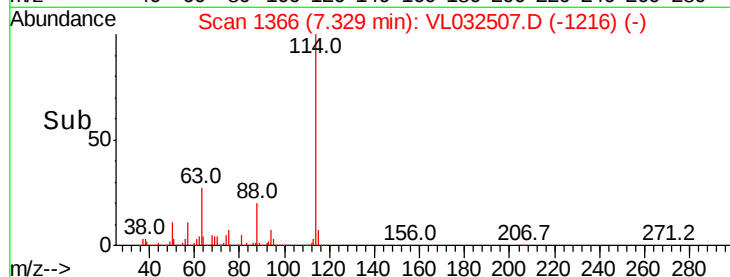
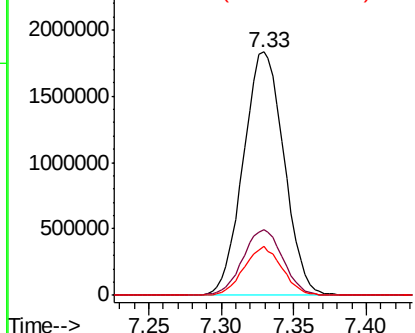
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 27.0  | 22.2  | 33.4  |
| 88  | 18.8  | 15.0  | 22.4  |



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: 9.024 ppbv

RT: 5.36 min Scan# 753

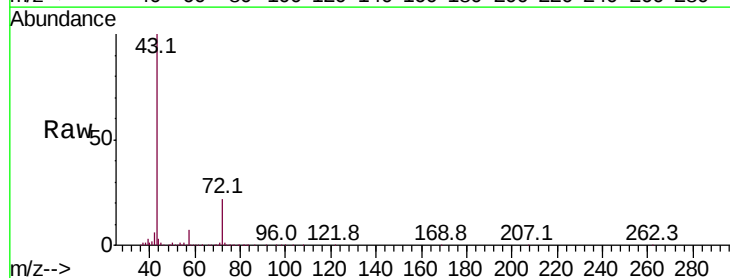
Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

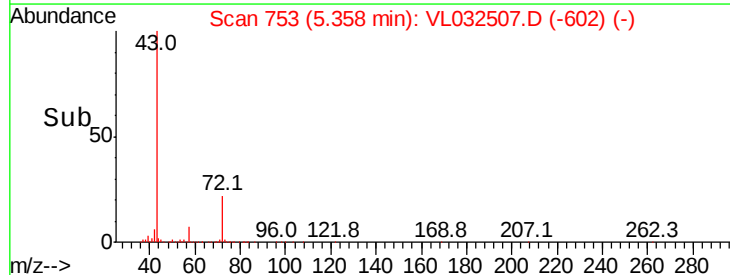
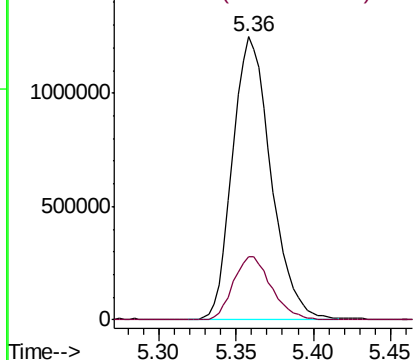
Tgt Ion: 43 Resp: 2147734

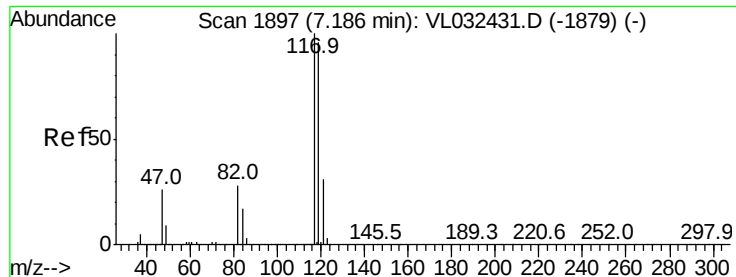
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 22.5  | 17.8  | 26.6  |



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 9.181 ppbv

RT: 7.17 min Scan# 1317

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampled :

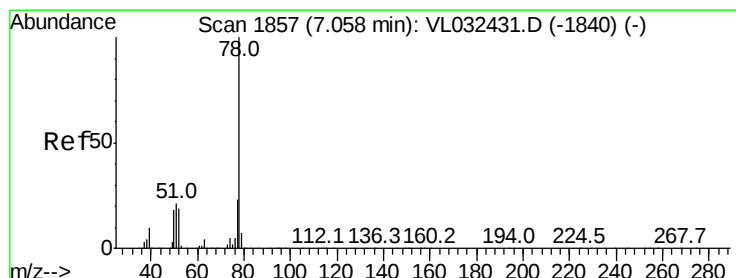
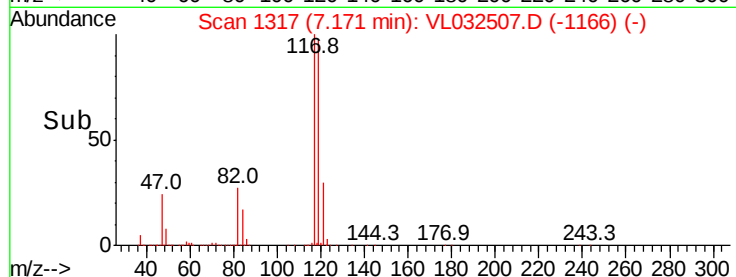
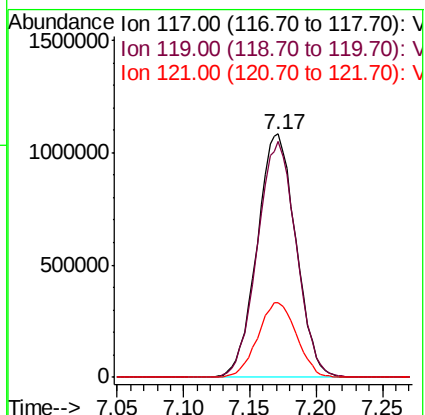
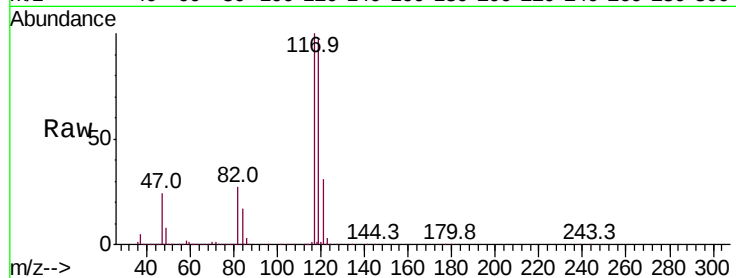
Tot Ion:117 Resp: 2211041

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 119 | 96.7  | 76.6  | 115.0 |
| 121 | 30.5  | 24.6  | 36.8  |

117 100

119 96.7 76.6 115.0

121 30.5 24.6 36.8



#36

Benzene

Concen: 10.433 ppbv

RT: 7.04 min Scan# 1276

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

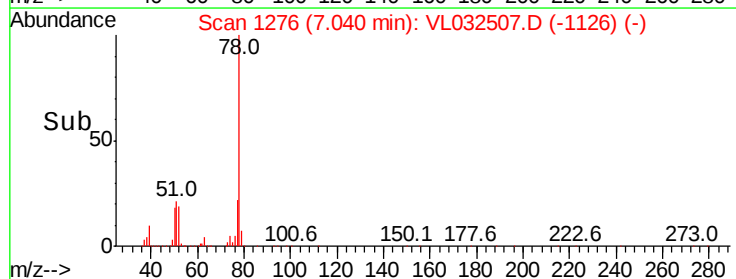
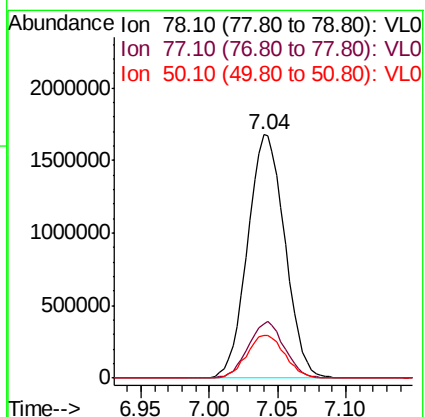
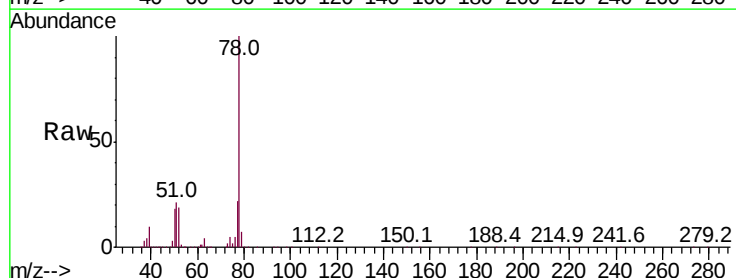
Tgt Ion: 78 Resp: 3181171

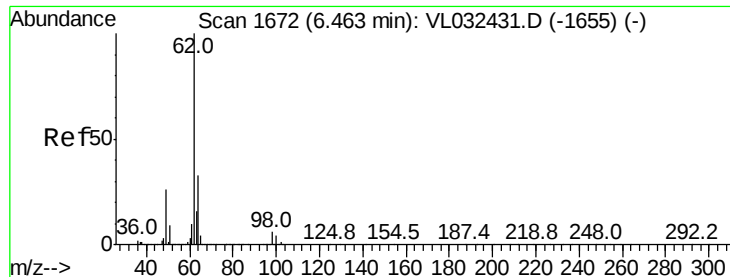
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 78  | 100   |       |       |
| 77  | 22.0  | 18.4  | 27.6  |
| 50  | 17.6  | 14.4  | 21.6  |

78 100

77 22.0 18.4 27.6

50 17.6 14.4 21.6





#37

1,2-Dichloroethane

Concen: 8.951 ppbv

RT: 6.45 min Scan# 1092

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

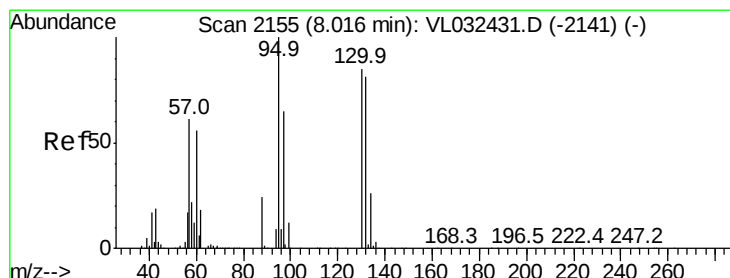
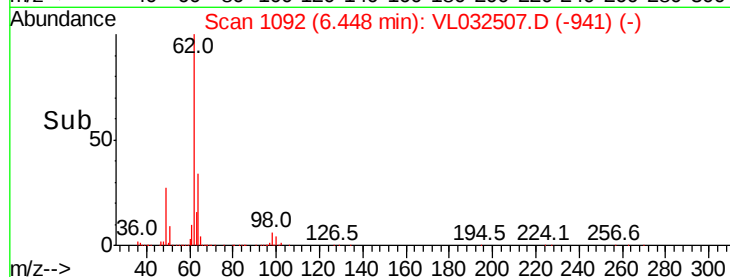
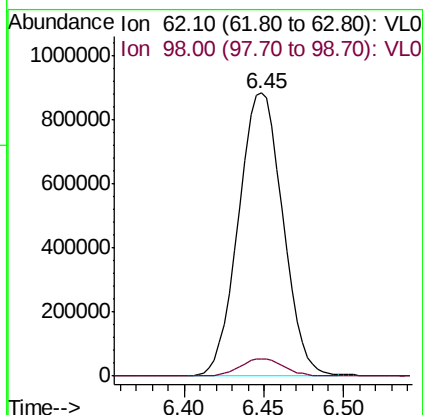
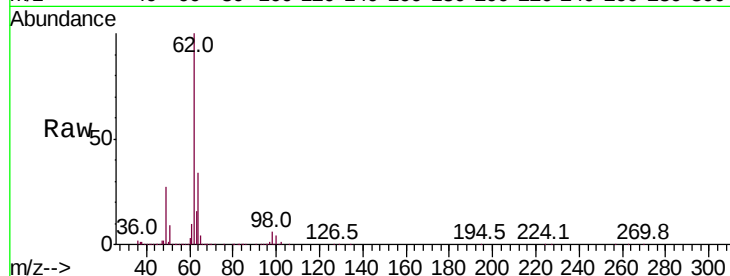
ClientSampleId :

Tot Ion: 62 Resp: 1672610

Ion Ratio Lower Upper

62 100

98 6.1 5.0 7.6



#38

Trichloroethene

Concen: 9.568 ppbv

RT: 8.00 min Scan# 1574

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Tgt Ion:130 Resp: 1108259

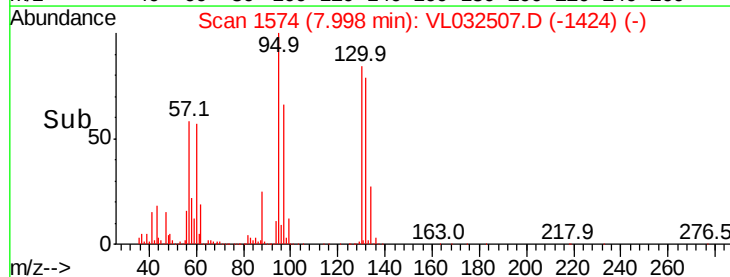
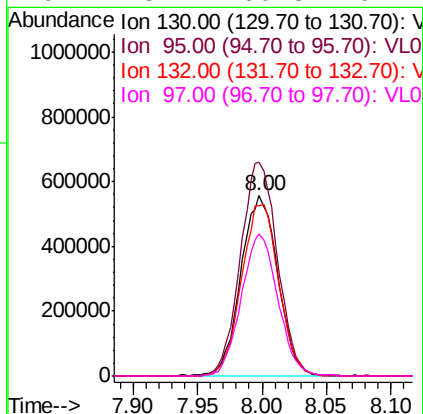
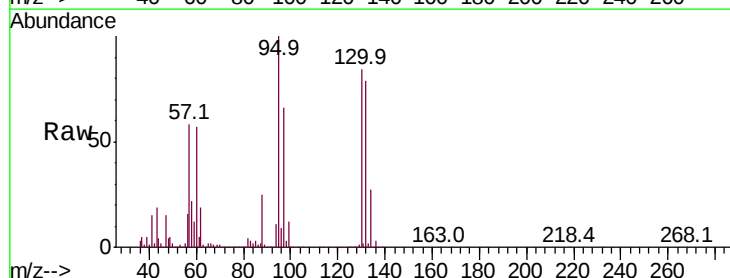
Ion Ratio Lower Upper

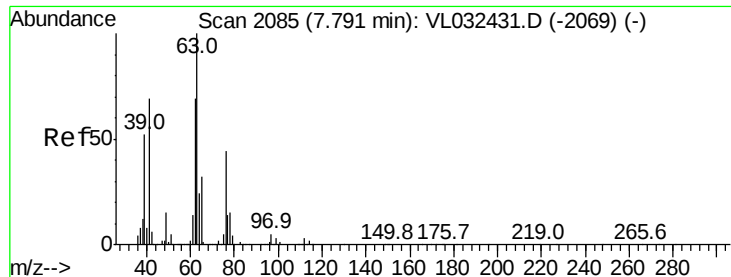
130 100

95 118.8 94.2 141.4

132 94.4 76.2 114.4

97 78.7 60.8 91.2





#39

1,2-Dichloropropane

Concen: 10.094 ppbv

RT: 7.78 min Scan# 1505

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

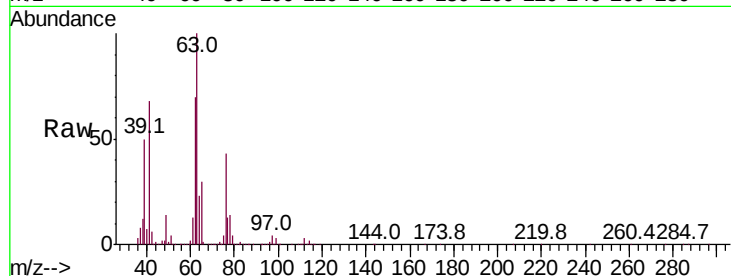
Tot Ion: 63 Resp: 1316838

Ion Ratio Lower Upper

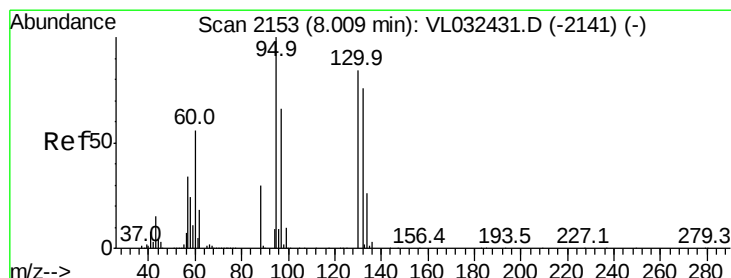
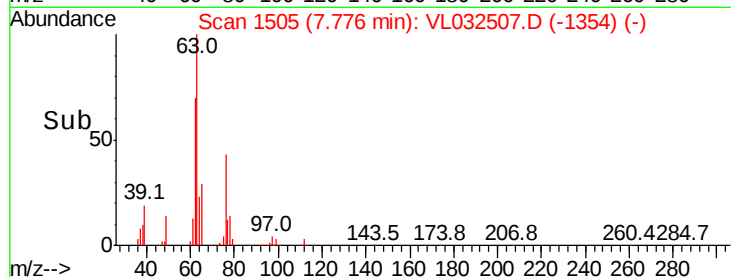
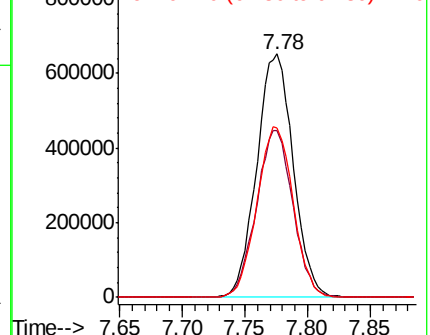
63 100

41 68.4 55.4 83.0

62 69.6 55.4 83.0



Abundance Ion 63.10 (62.80 to 63.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0  
Ion 62.10 (61.80 to 62.80): VL0



#40

1,4-Dioxane

Concen: 11.424 ppbv

RT: 7.99 min Scan# 1572

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Tgt Ion: 88 Resp: 447141

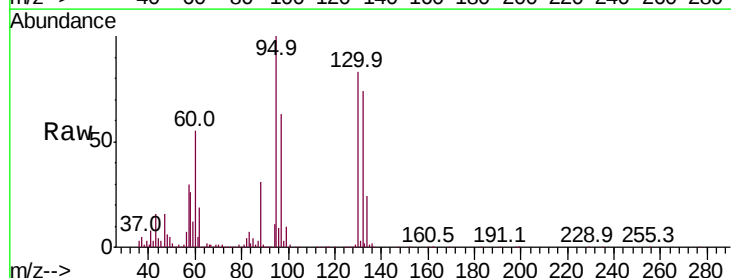
Ion Ratio Lower Upper

88 100

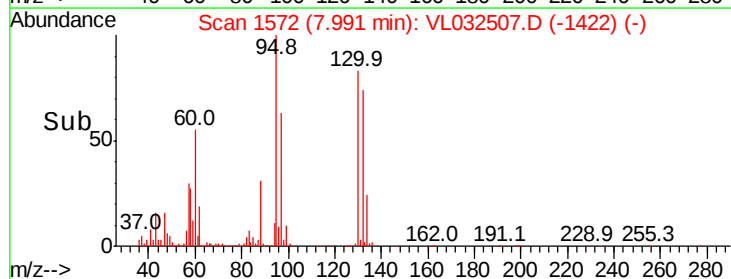
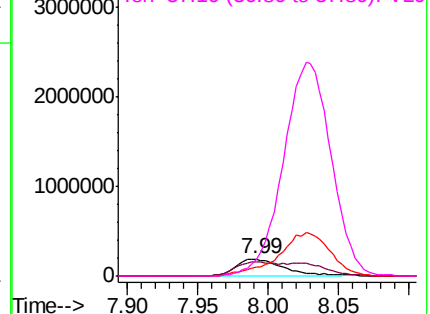
58 140.8 119.7 179.5

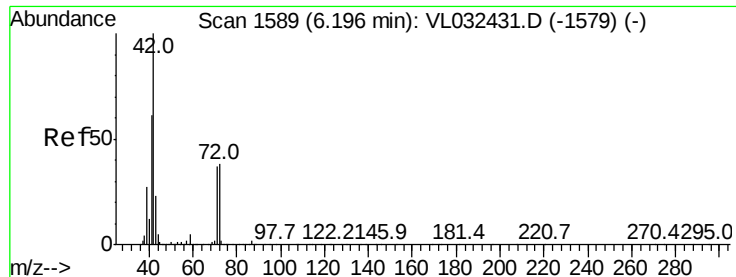
43 276.4 253.0 379.4

57 1260.8 1156.9 1735.3



Abundance Ion 88.10 (87.80 to 88.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0  
Ion 43.10 (42.80 to 43.80): VL0  
Ion 57.10 (56.80 to 57.80): VL0

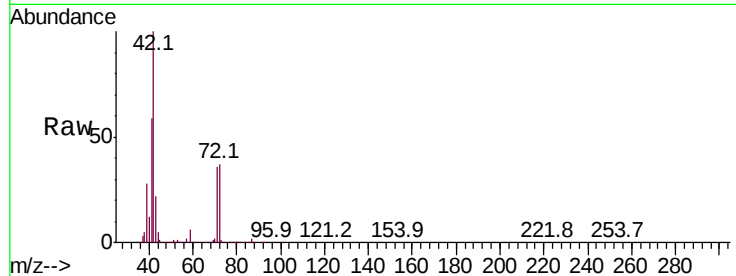




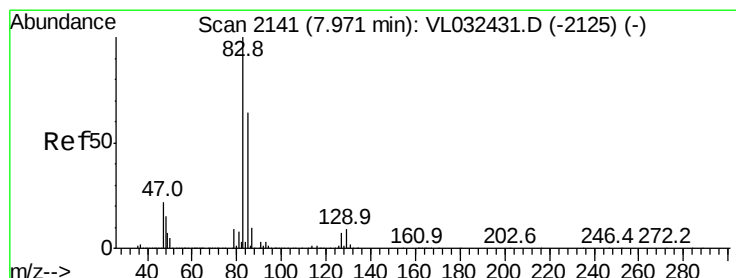
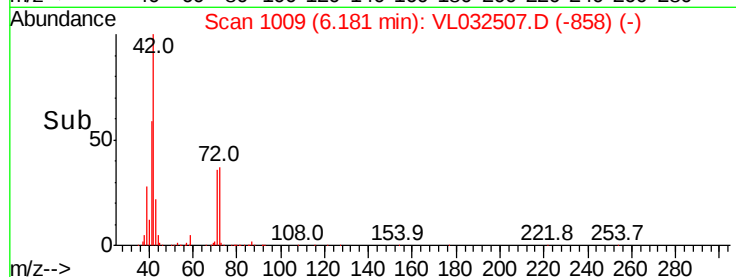
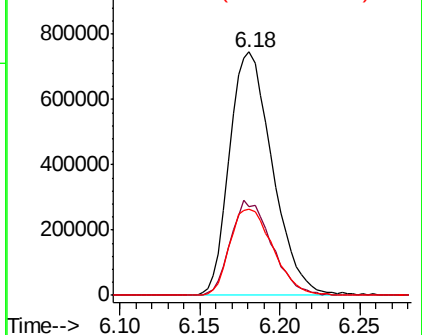
#41  
Tetrahydrofuran  
Concen: 10.504 ppbv  
RT: 6.18 min Scan# 1009  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 42 Resp: 1360948  
Ion Ratio Lower Upper  
42 100  
72 37.6 29.5 44.3  
71 36.1 28.3 42.5

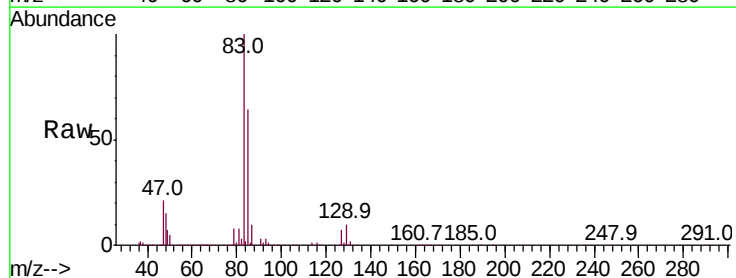


Abundance Ion 42.10 (41.80 to 42.80): VL0  
Ion 72.10 (71.80 to 72.80): VL0  
Ion 71.10 (70.80 to 71.80): VL0

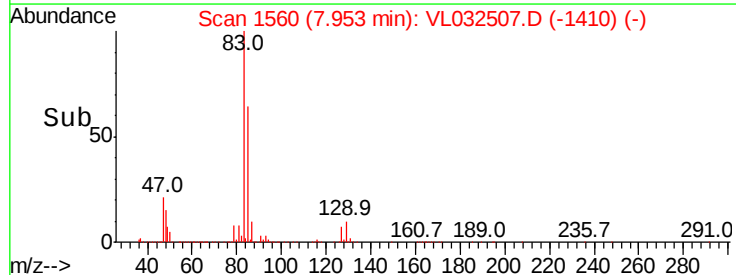
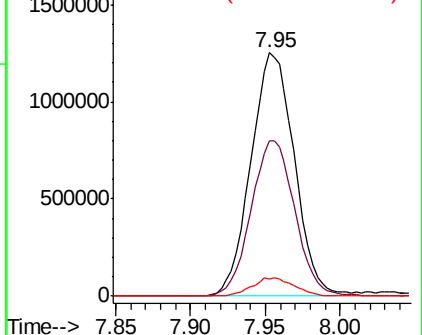


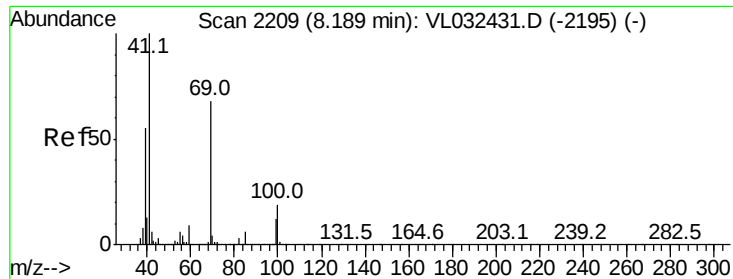
#42  
Bromodichloromethane  
Concen: 9.779 ppbv  
RT: 7.95 min Scan# 1560  
Delta R.T. -0.02 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion: 83 Resp: 2520405  
Ion Ratio Lower Upper  
83 100  
85 64.0 51.1 76.7  
127 7.2 5.8 8.8



Abundance Ion 83.00 (82.70 to 83.70): VL0  
Ion 85.00 (84.70 to 85.70): VL0  
Ion 126.90 (126.60 to 127.60): V

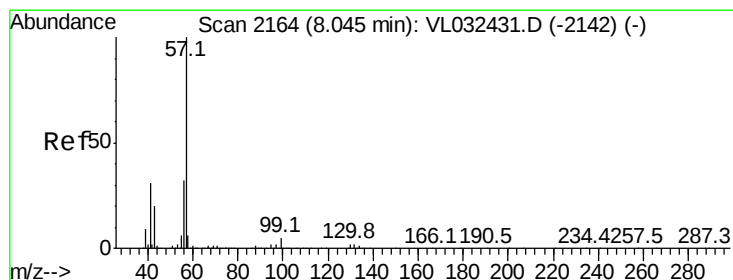
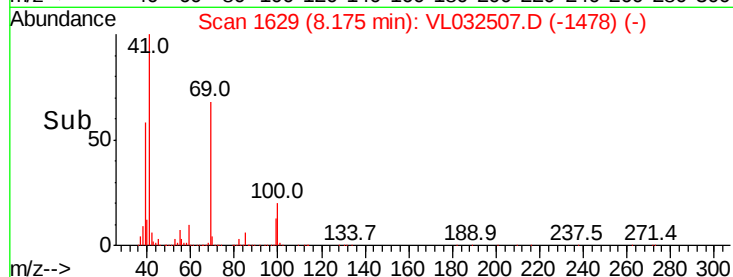
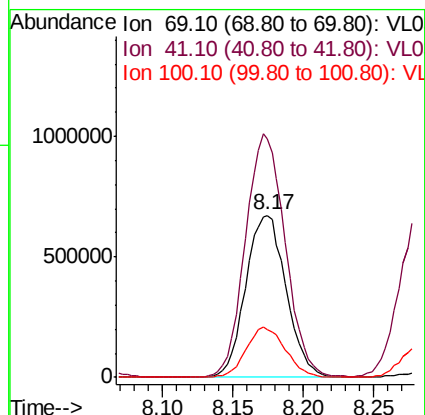
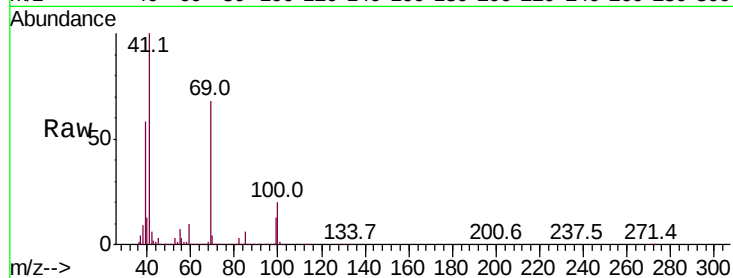




#43  
Methvl Methacrylate  
Concen: 10.414 ppbv  
RT: 8.17 min Scan# 1629  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

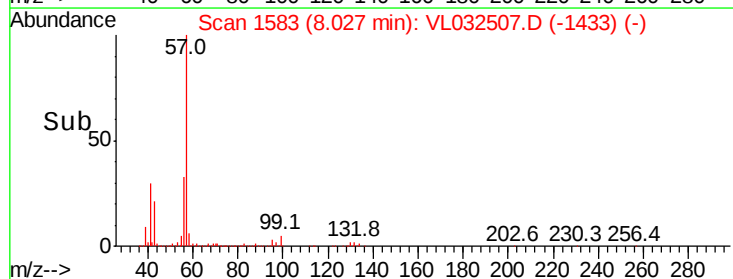
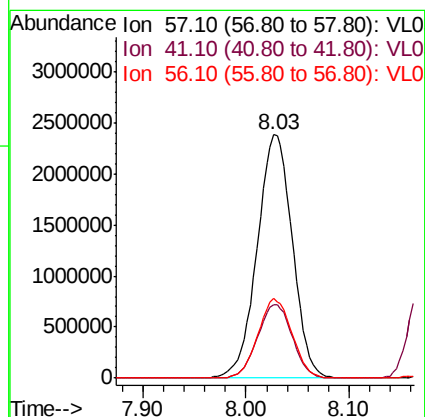
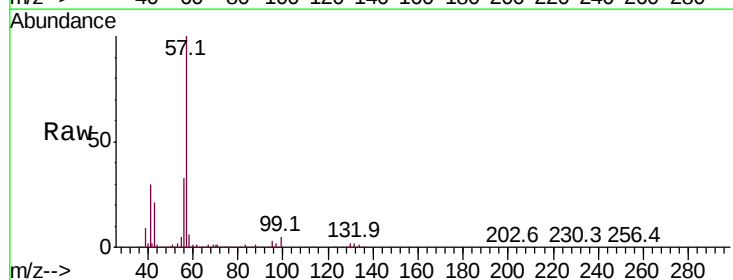
Instrument :  
MSVOA\_L  
ClientSampleId :

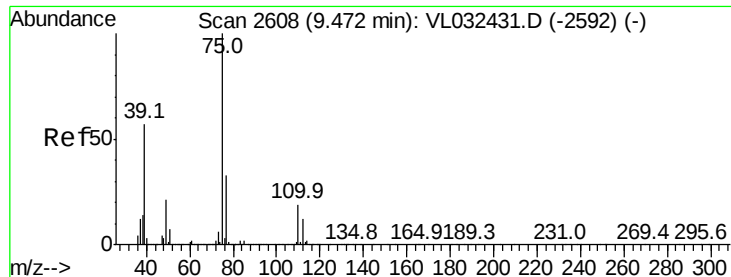
Tot Ion: 69 Resp: 1347153  
Ion Ratio Lower Upper  
69 100  
41 147.8 117.1 175.7  
100 30.2 23.4 35.2



#44  
2,2,4-Trimethylpentane  
Concen: 9.554 ppbv  
RT: 8.03 min Scan# 1583  
Delta R.T. -0.02 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion: 57 Resp: 5632217  
Ion Ratio Lower Upper  
57 100  
41 29.8 24.4 36.6  
56 31.7 25.7 38.5





#45

t-1,3-Dichloropropene

Concen: 13.628 ppbv

RT: 9.45 min Scan# 2026

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

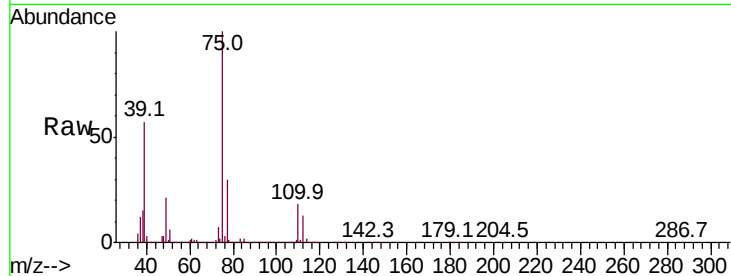
Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 75 Resp: 1886467

Ion Ratio Lower Upper

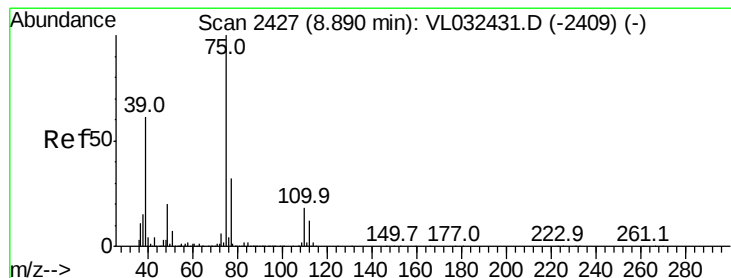
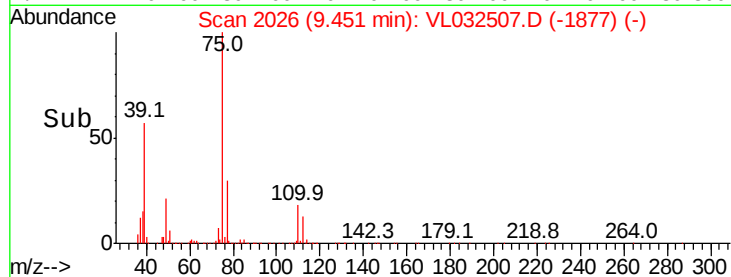
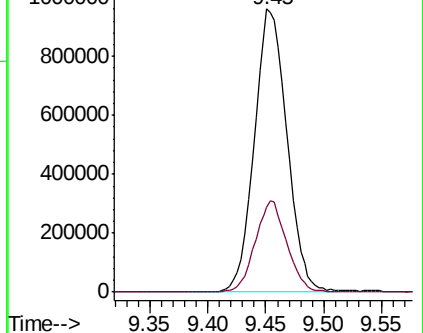
75 100

77 30.2 26.2 39.2



Abundance Ion 75.10 (74.80 to 75.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#46

cis-1,3-Dichloropropene

Concen: 11.535 ppbv

RT: 8.88 min Scan# 1847

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

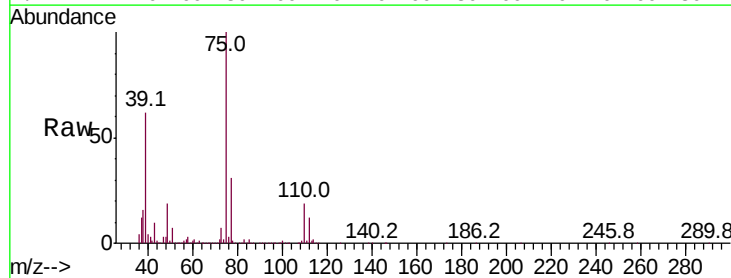
Tgt Ion: 75 Resp: 2040377

Ion Ratio Lower Upper

75 100

39 62.0 48.9 73.3

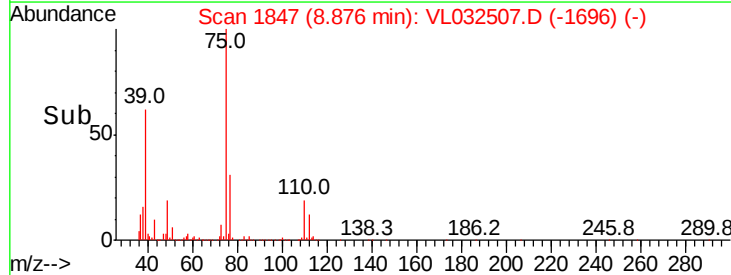
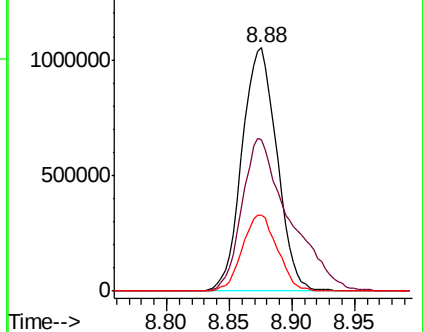
77 31.0 25.4 38.0

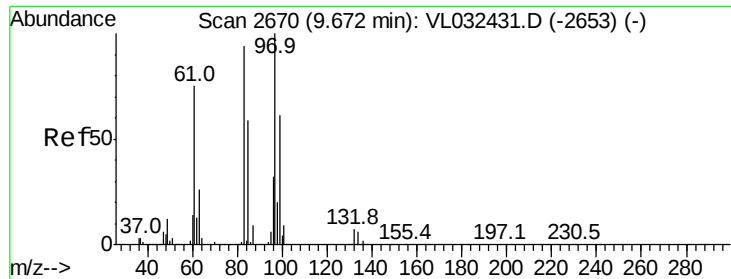


Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0



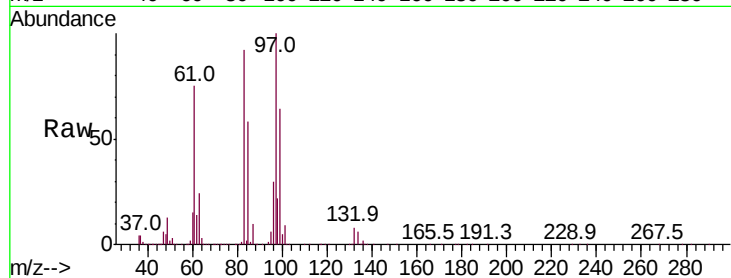


#47  
 1,1,2-Trichloroethane  
 Concen: 10.097 ppbv  
 RT: 9.65 min Scan# 2089  
 Delta R.T. -0.02 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Instrument :  
 MSVOA\_L  
 ClientSampled :

Tot Ion: 97 Resp: 1400522

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 97  | 100   |       |       |
| 83  | 92.2  | 75.0  | 112.4 |
| 85  | 57.9  | 47.5  | 71.3  |
| 99  | 63.5  | 49.0  | 73.6  |



Abundance Ion 97.00 (96.70 to 97.70): VL0

1000000 Ion 83.00 (82.70 to 83.70): VL0

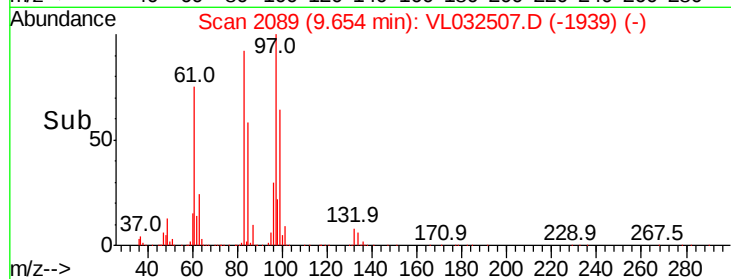
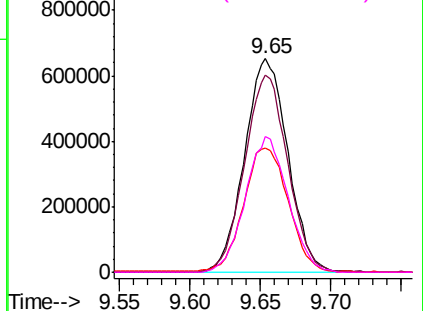
800000 Ion 85.00 (84.70 to 85.70): VL0

600000 Ion 99.00 (98.70 to 99.70): VL0

400000

200000

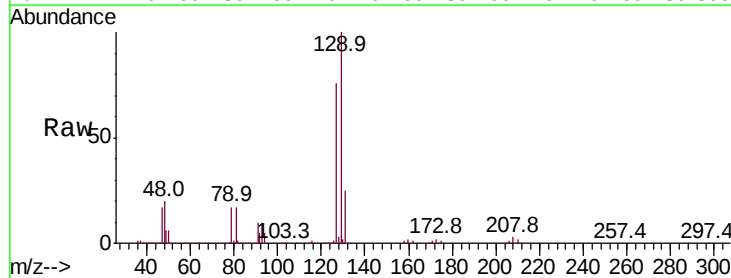
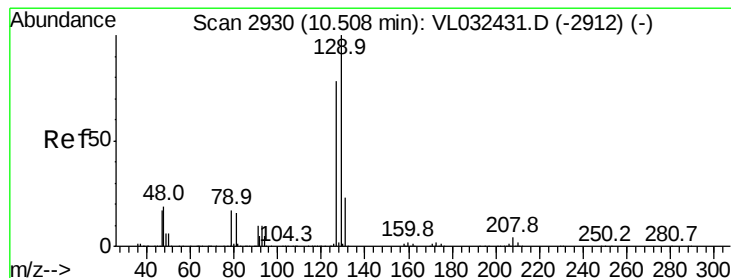
0



#48  
 Dibromochloromethane  
 Concen: 12.034 ppbv  
 RT: 10.49 min Scan# 2349  
 Delta R.T. -0.02 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Tgt Ion: 129 Resp: 2311675

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 129 | 100   |       |       |
| 127 | 78.7  | 39.5  | 118.3 |



Abundance Ion 129.00 (128.70 to 129.70): V

1200000 Ion 127.00 (126.70 to 127.70): V

1000000

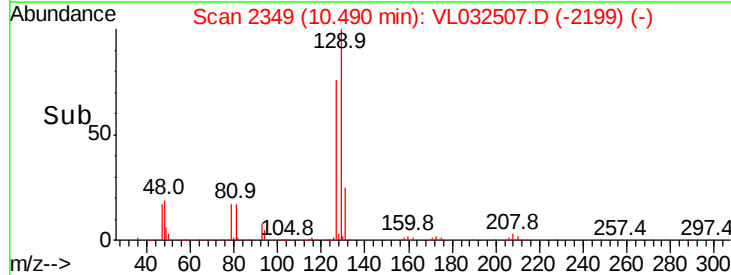
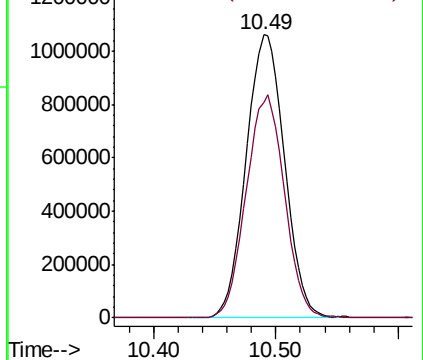
800000

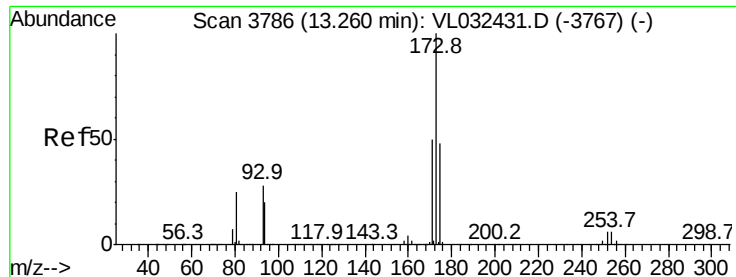
600000

400000

200000

0





#49

Bromoform

Concen: 10.630 ppbv

RT: 13.24 min Scan# 3205

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

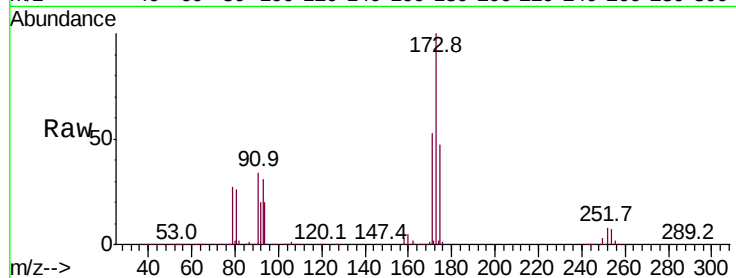
Tot Ion:173 Resp: 1774927

Ion Ratio Lower Upper

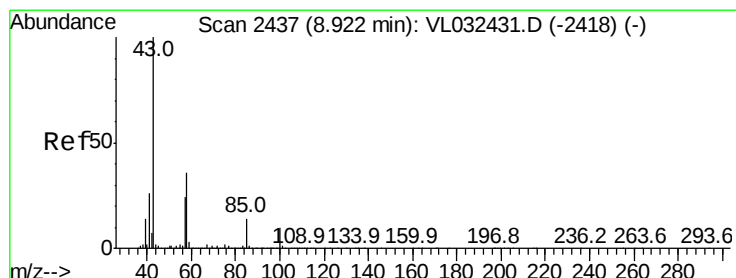
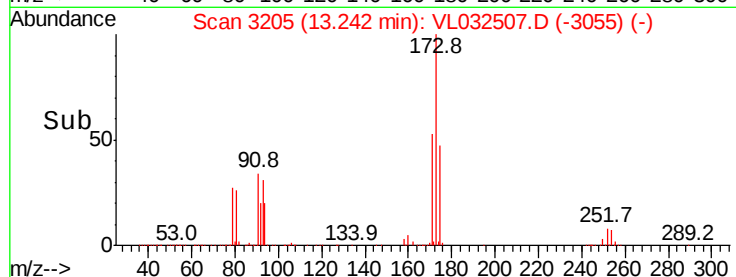
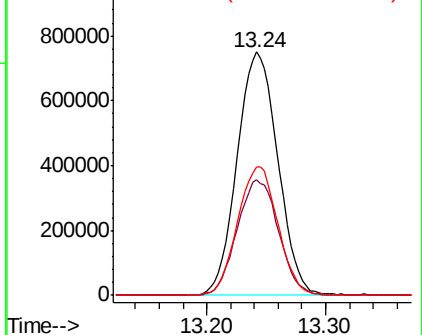
173 100

175 48.6 38.9 58.3

171 52.7 41.6 62.4



Abundance Ion 172.90 (172.60 to 173.60): V  
Ion 174.90 (174.60 to 175.60): V  
Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 9.792 ppbv

RT: 8.90 min Scan# 1856

Delta R.T. -0.02 min

Lab File: VL032507.D

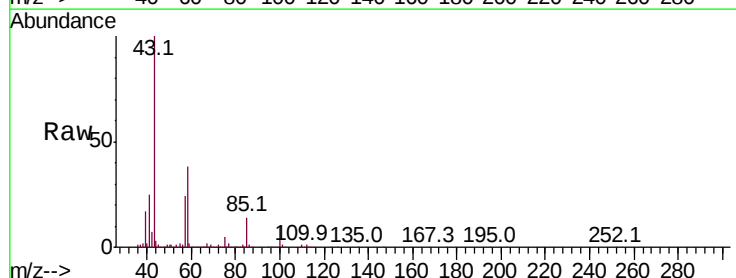
Acq: 20 Sep 2018 13:32

Tgt Ion: 43 Resp: 3510673

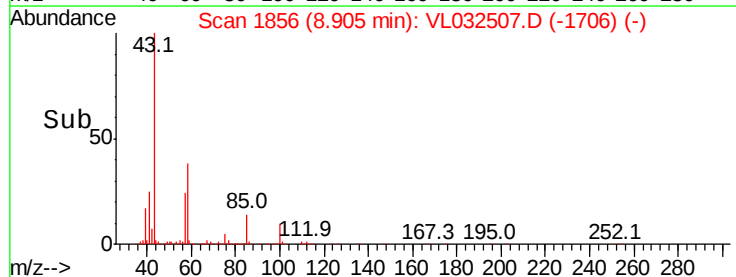
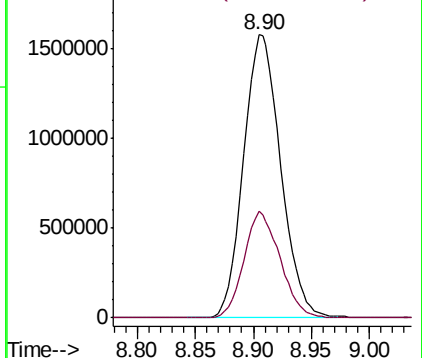
Ion Ratio Lower Upper

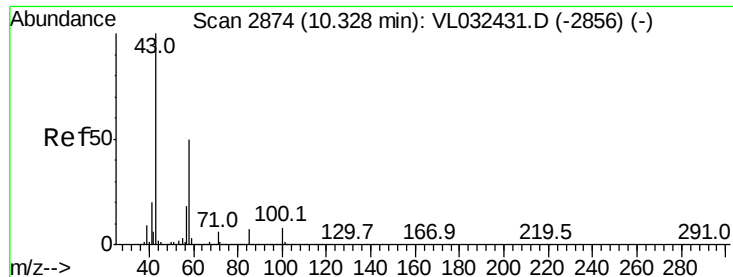
43 100

58 36.8 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: 13.456 ppbv

RT: 10.31 min Scan# 2293

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

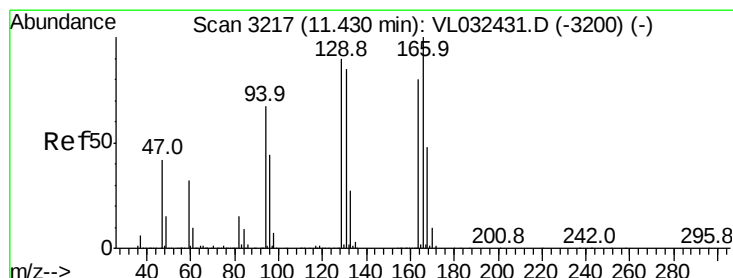
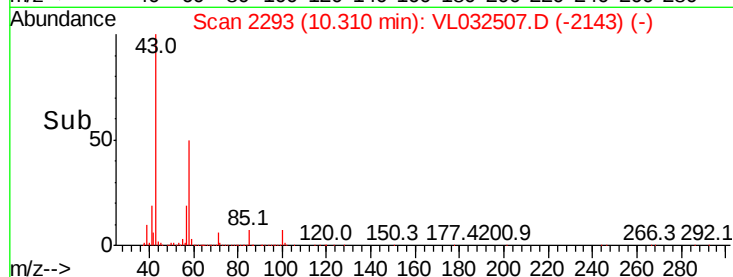
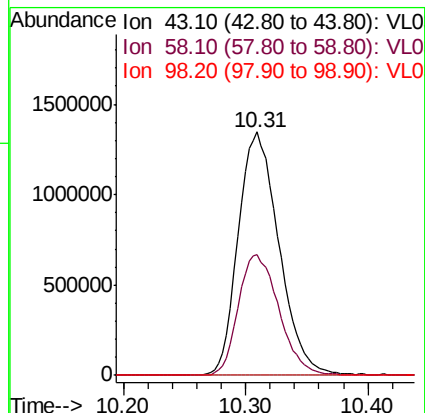
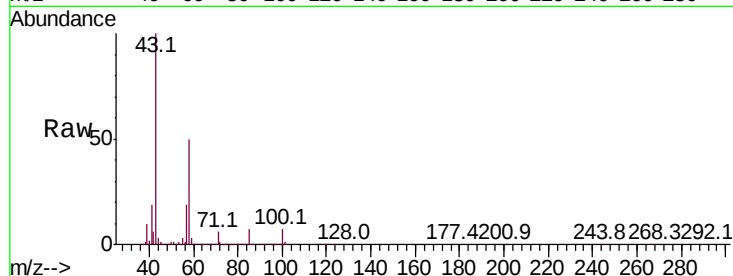
Instrument :

MSVOA\_L

ClientSampleId :

Tot Ion: 43 Resp: 3107418

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 58  | 49.8  | 39.2  | 58.8  |
| 98  | 0.4   | 0.4   | 0.6#  |



#52

Tetrachloroethene

Concen: 10.609 ppbv

RT: 11.41 min Scan# 2636

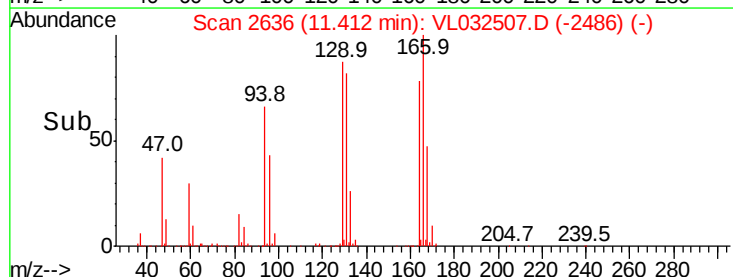
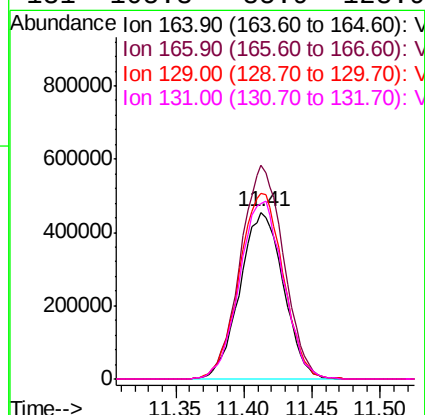
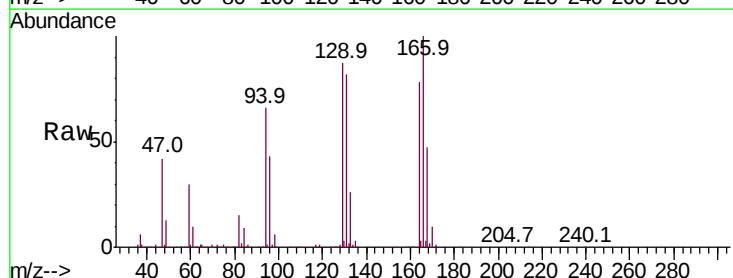
Delta R.T. -0.02 min

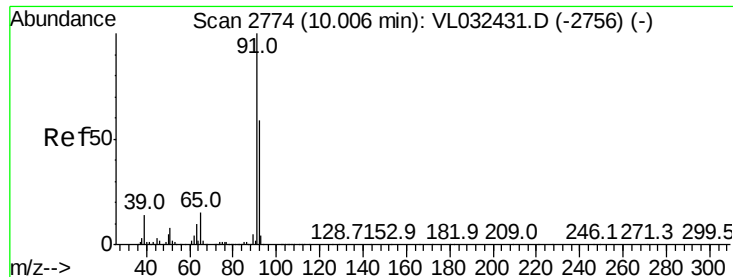
Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Tgt Ion: 164 Resp: 1003041

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 164 | 100   |       |       |
| 166 | 128.1 | 100.6 | 150.8 |
| 129 | 111.1 | 89.9  | 134.9 |
| 131 | 105.3 | 85.9  | 128.9 |





#53

Toluene

Concen: 12.499 ppbv

RT: 9.98 min Scan# 2192

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

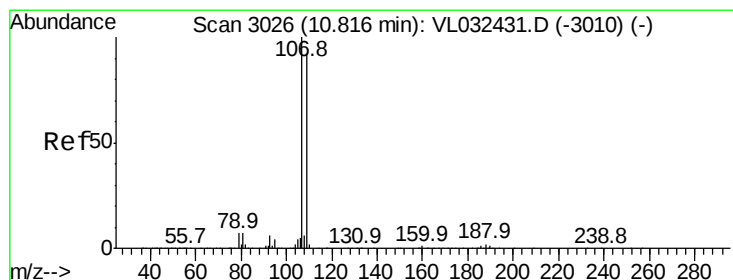
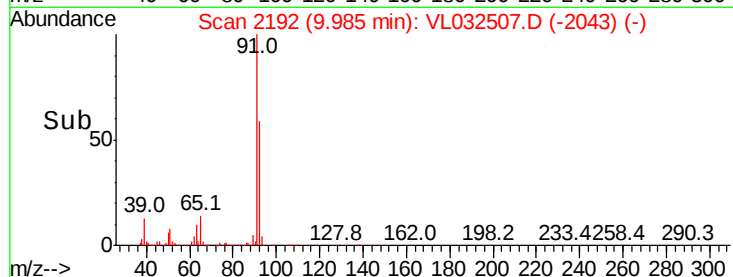
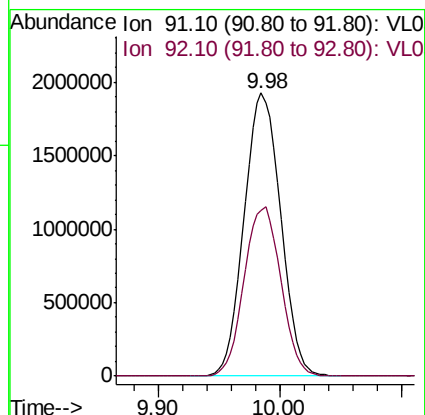
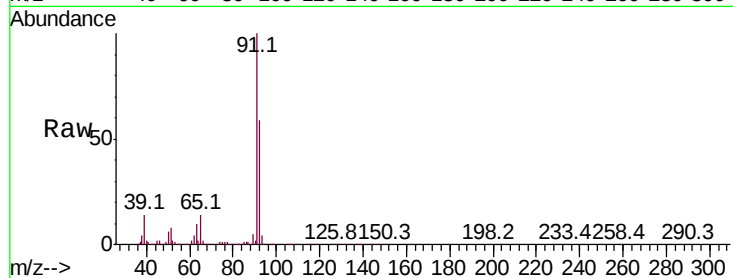
Instrument :  
MSVOA\_L  
ClientSampleId :

Tot Ion: 91 Resp: 3983796

Ion Ratio Lower Upper

91 100

92 60.2 48.1 72.1



#54

1,2-Dibromoethane

Concen: 11.387 ppbv

RT: 10.80 min Scan# 2446

Delta R.T. -0.01 min

Lab File: VL032507.D

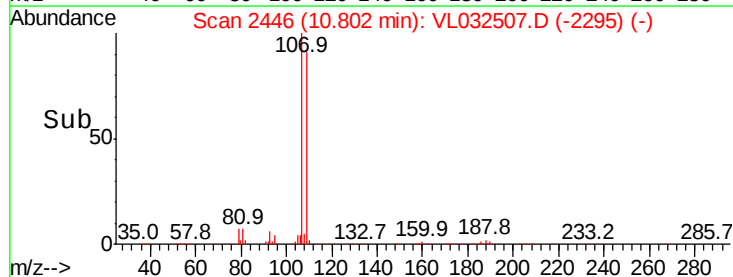
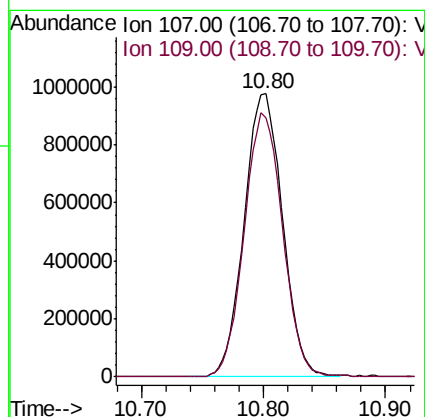
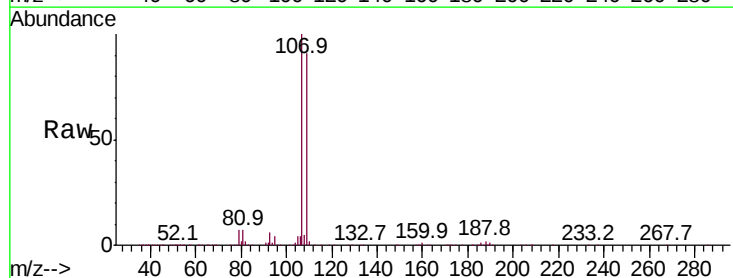
Acq: 20 Sep 2018 13:32

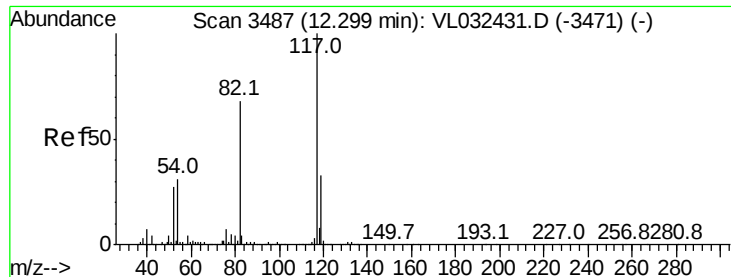
Tgt Ion: 107 Resp: 2120678

Ion Ratio Lower Upper

107 100

109 91.4 73.9 110.9

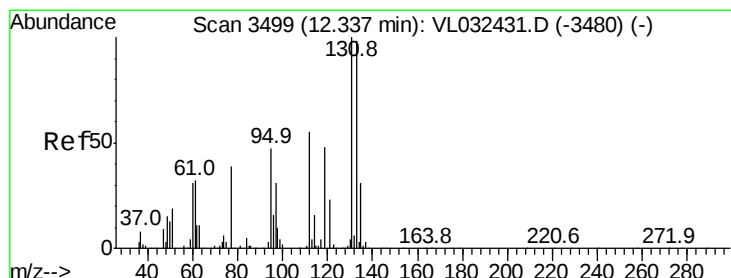
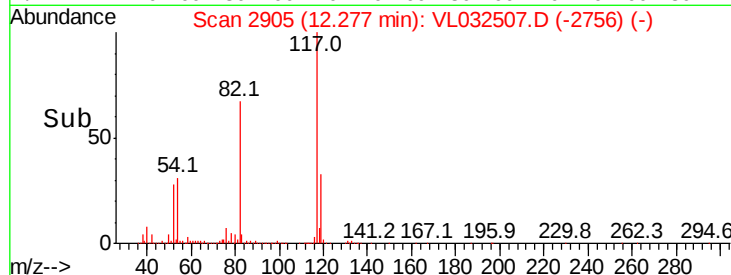
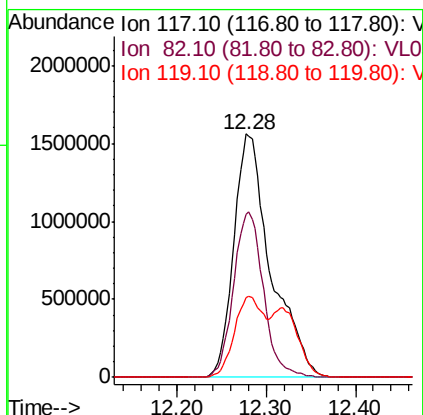
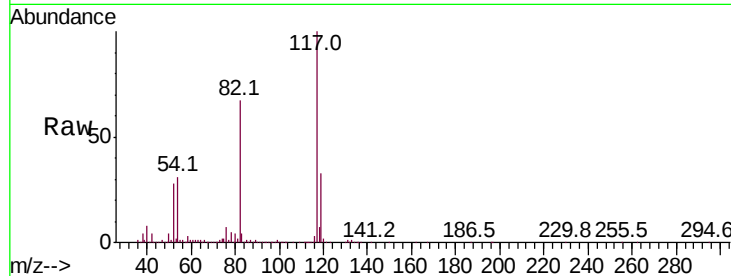




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.28 min Scan# 2905  
Delta R.T. -0.02 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

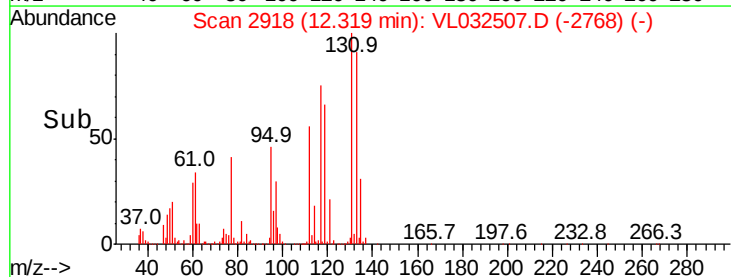
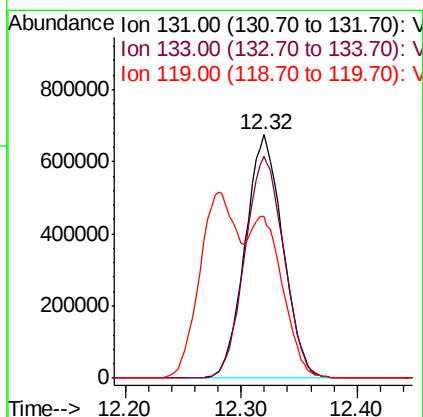
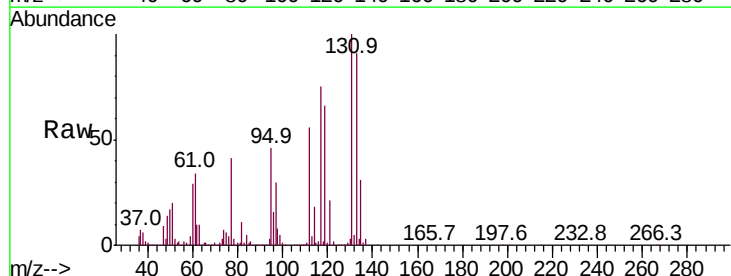
Instrument :  
MSVOA\_L  
ClientSampleId :

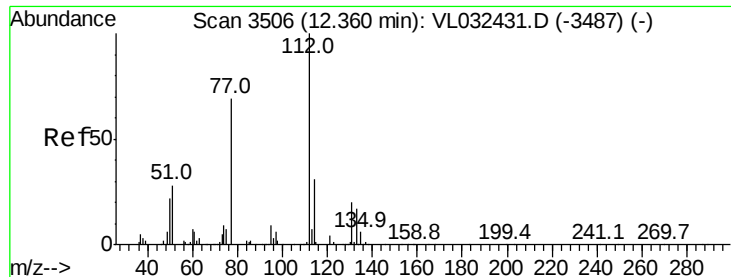
Tot Ion:117 Resp: 4512265  
Ion Ratio Lower Upper  
117 100  
82 55.0 53.0 79.6  
119 25.4 45.9 68.9#



#56  
1,1,1,2-Tetrachloroethane  
Concen: 7.489 ppbv  
RT: 12.32 min Scan# 2918  
Delta R.T. -0.02 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion:131 Resp: 1523517  
Ion Ratio Lower Upper  
131 100  
133 94.4 77.0 115.4  
119 63.9 114.2 171.2#





#57

Chlorobenzene

Concen: 7.559 ppbv

RT: 12.34 min Scan# 2926

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

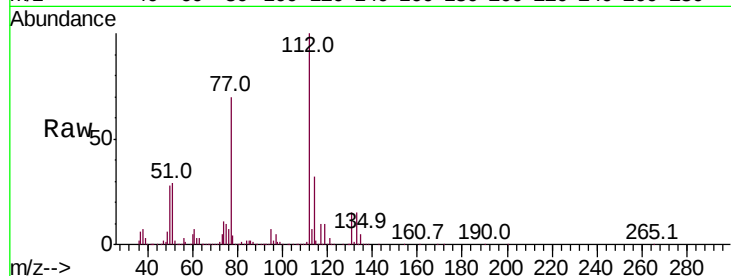
Tot Ion:112 Resp: 2726081

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 112 | 100   |       |       |
| 77  | 69.3  | 56.1  | 84.1  |
| 114 | 31.8  | 27.8  | 34.0  |

112 100

77 69.3 56.1 84.1

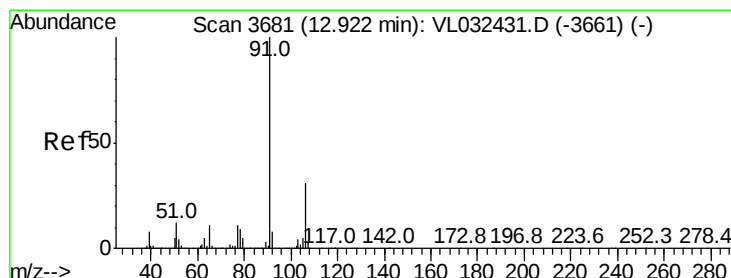
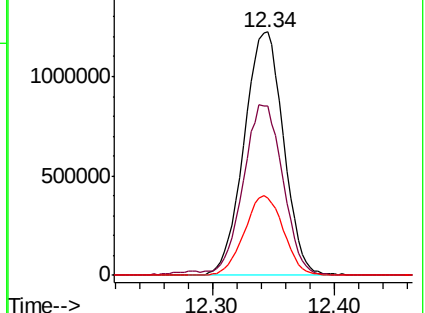
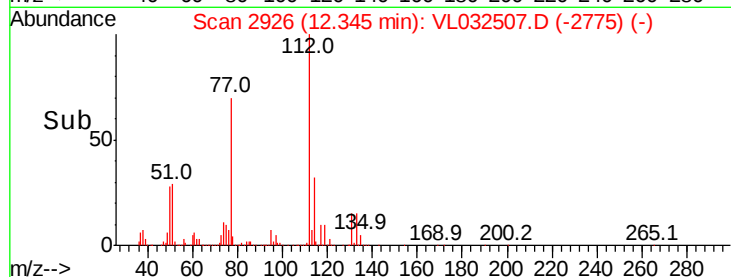
114 31.8 27.8 34.0



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 9.141 ppbv

RT: 12.90 min Scan# 3100

Delta R.T. -0.02 min

Lab File: VL032507.D

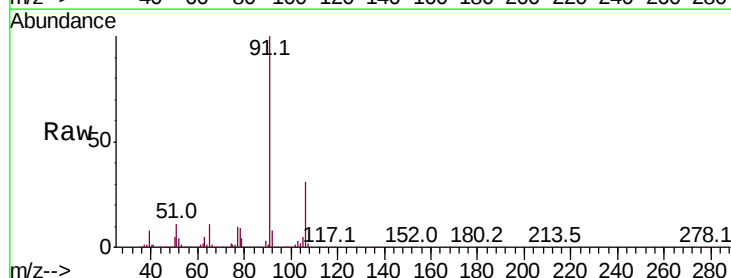
Acq: 20 Sep 2018 13:32

Tgt Ion: 91 Resp: 4935822

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 106 | 30.6  | 24.8  | 37.2  |

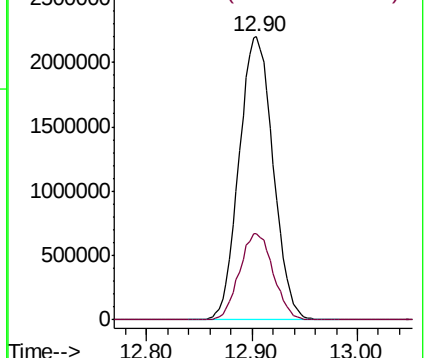
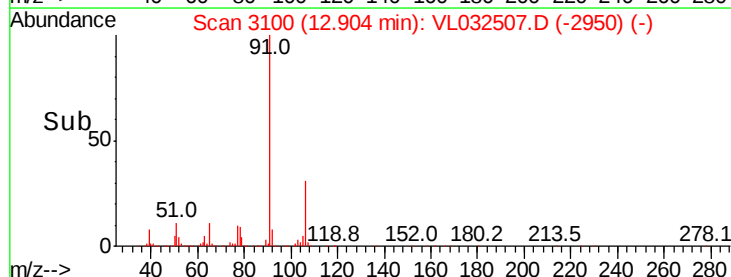
91 100

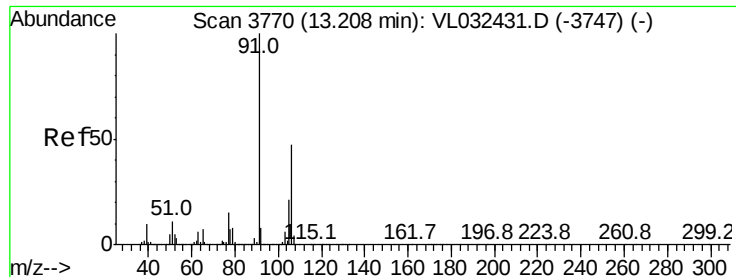
106 30.6 24.8 37.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 8.609 ppbv

RT: 13.19 min Scan# 3189

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

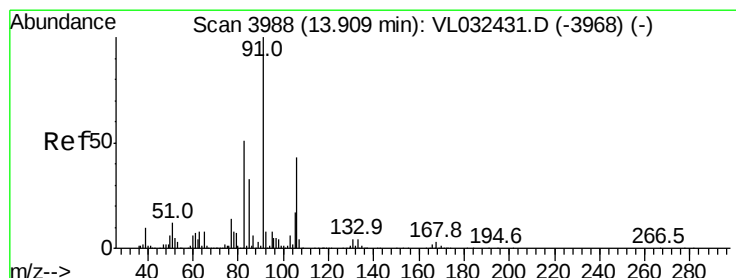
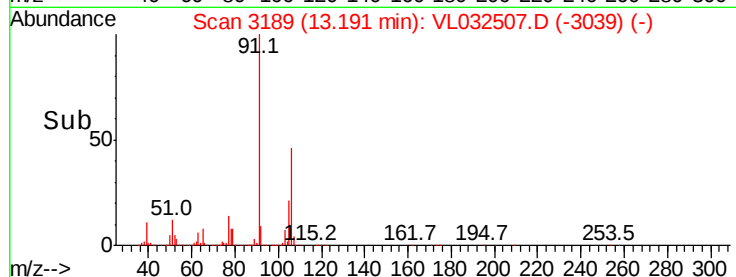
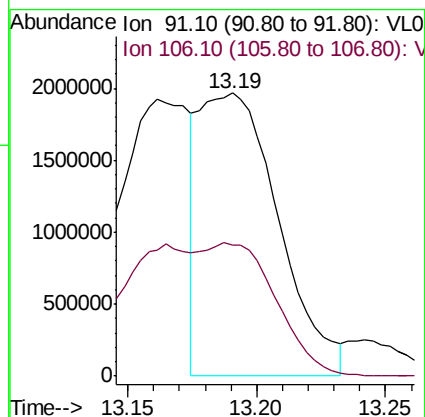
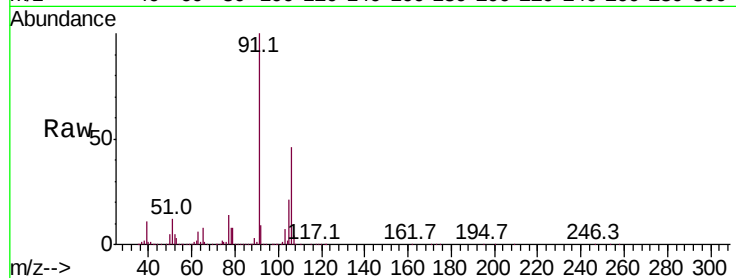
ClientSampleId :

Tot Ion: 91 Resp: 4144570

Ion Ratio Lower Upper

91 100

106 88.4 36.6 55.0#



#60

o-Xylene

Concen: 8.257 ppbv

RT: 13.89 min Scan# 3407

Delta R.T. -0.02 min

Lab File: VL032507.D

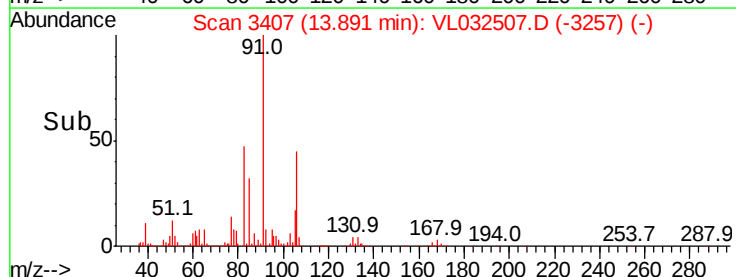
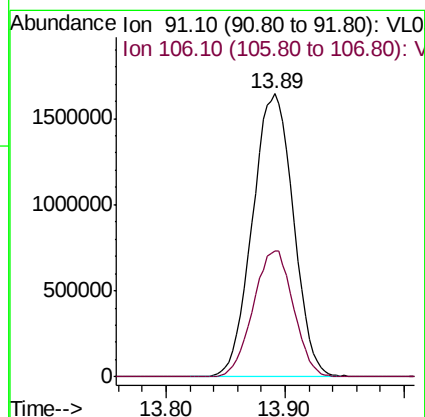
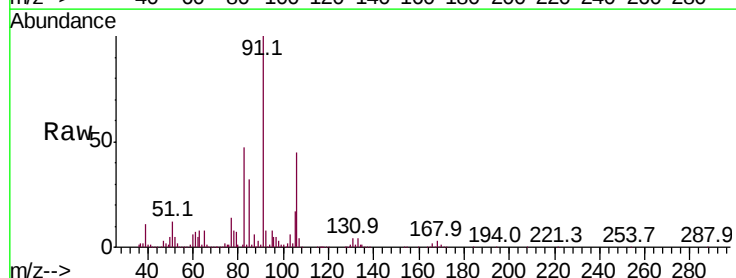
Acq: 20 Sep 2018 13:32

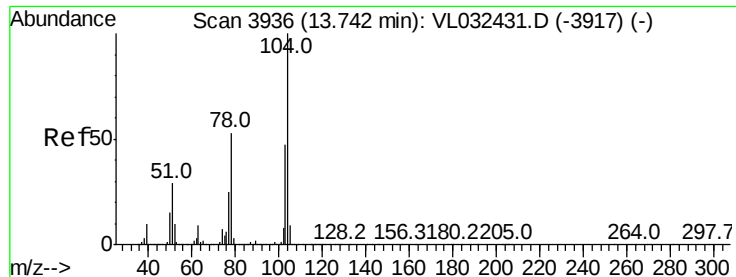
Tgt Ion: 91 Resp: 3904409

Ion Ratio Lower Upper

91 100

106 44.0 21.9 65.7





#61

Stvrene

Concen: 9.778 ppbv

RT: 13.72 min Scan# 3355

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

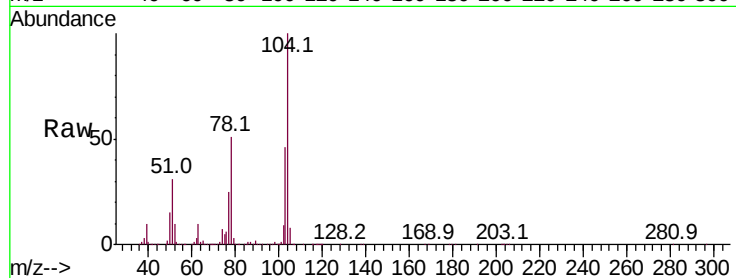
Tot Ion:104 Resp: 2993590

Ion Ratio Lower Upper

104 100

78 52.5 41.8 62.8

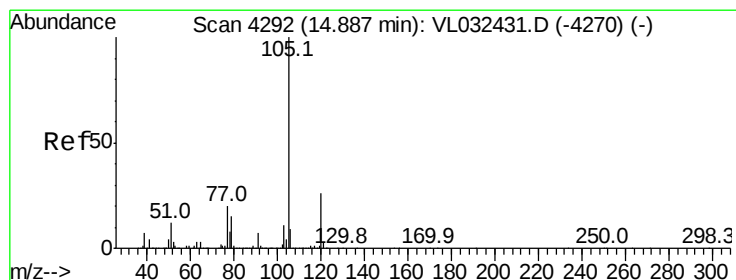
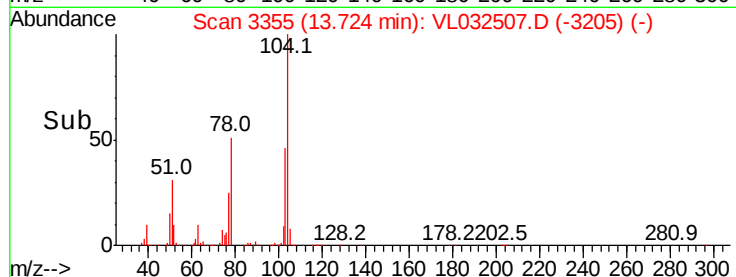
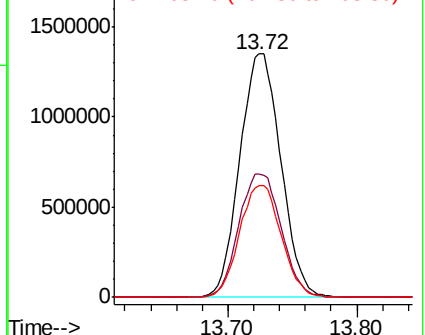
103 46.9 38.0 57.0



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 8.381 ppbv

RT: 14.87 min Scan# 3710

Delta R.T. -0.02 min

Lab File: VL032507.D

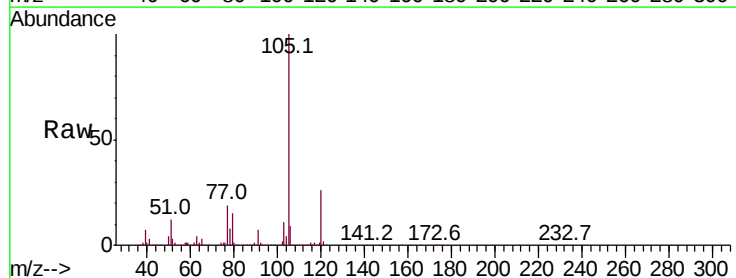
Acq: 20 Sep 2018 13:32

Tgt Ion:105 Resp: 5571607

Ion Ratio Lower Upper

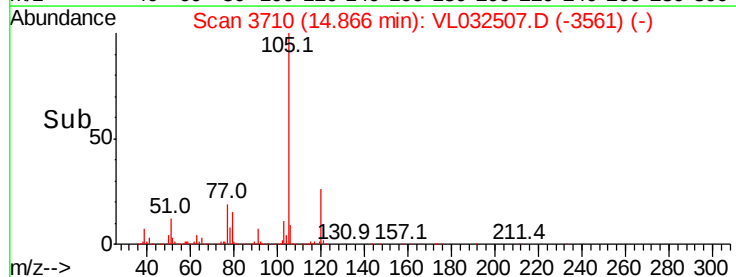
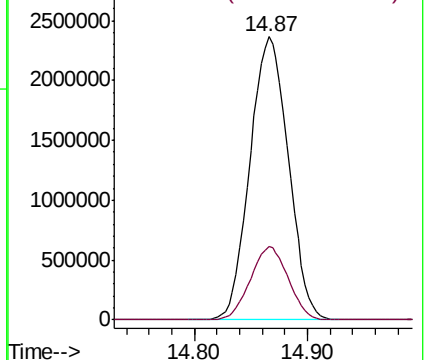
105 100

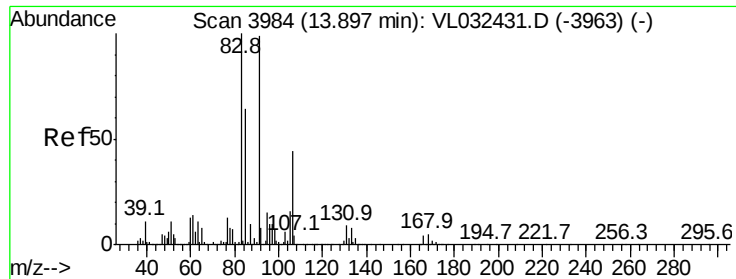
120 25.6 20.6 31.0



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: 6.947 ppbv

RT: 13.88 min Scan# 3402

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

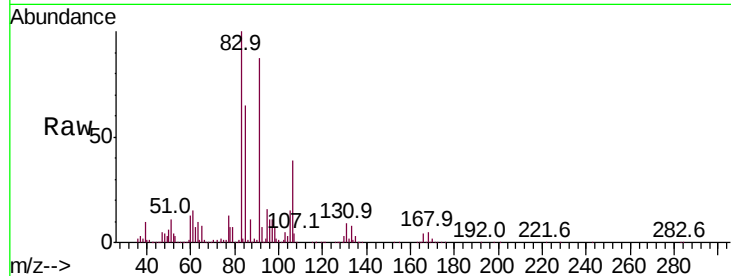
Tot Ion: 83 Resp: 2937075

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 83  | 100   |       |       |
| 131 | 8.6   | 4.3   | 12.8  |
| 85  | 64.8  | 32.3  | 96.8  |

83 100

131 8.6 4.3 12.8

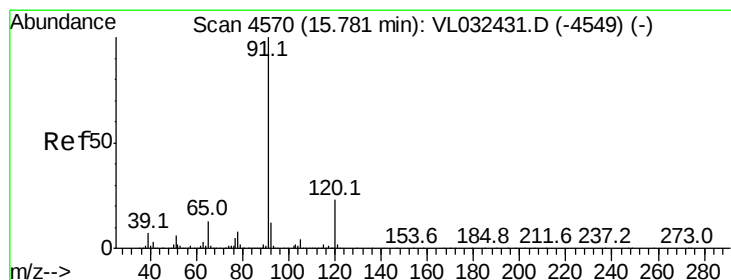
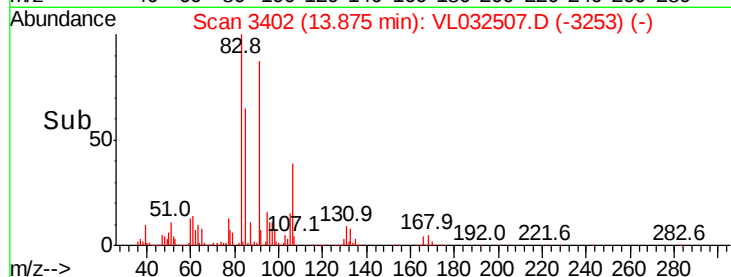
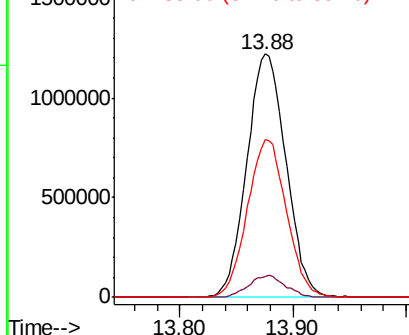
85 64.8 32.3 96.8



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: 8.369 ppbv

RT: 15.76 min Scan# 3989

Delta R.T. -0.02 min

Lab File: VL032507.D

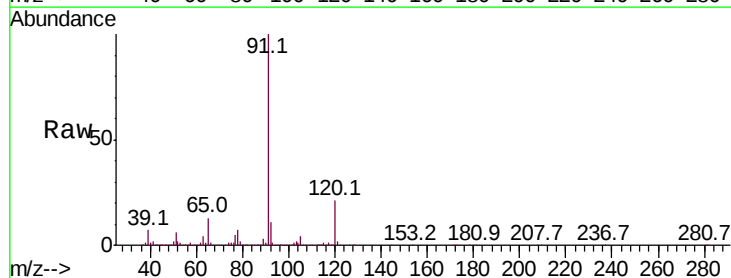
Acq: 20 Sep 2018 13:32

Tgt Ion:120 Resp: 1454485

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 120 | 100   |       |       |
| 91  | 475.9 | 381.8 | 572.6 |

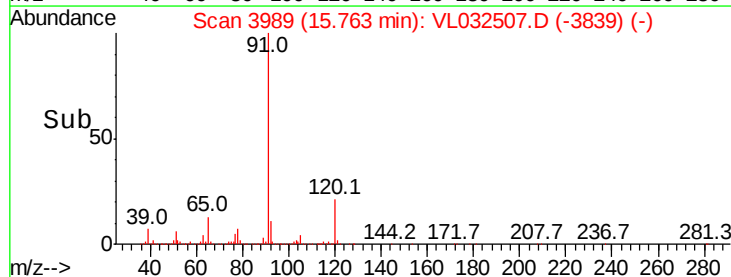
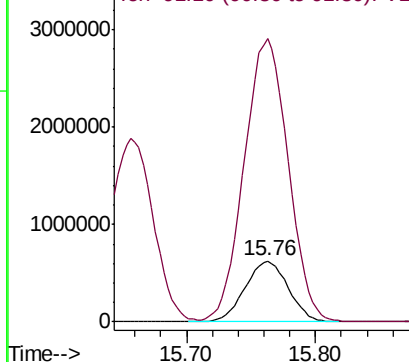
120 100

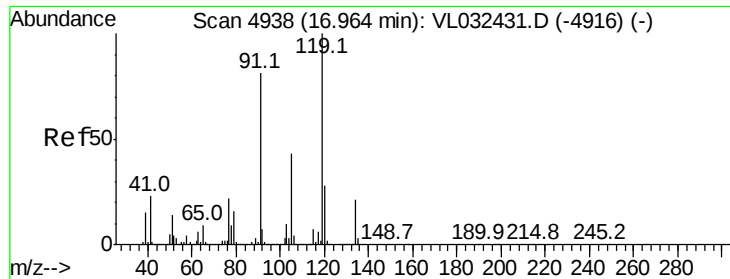
91 475.9 381.8 572.6



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





#65

tert-Butylbenzene

Concen: 8.052 ppbv

RT: 16.95 min Scan# 4358

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

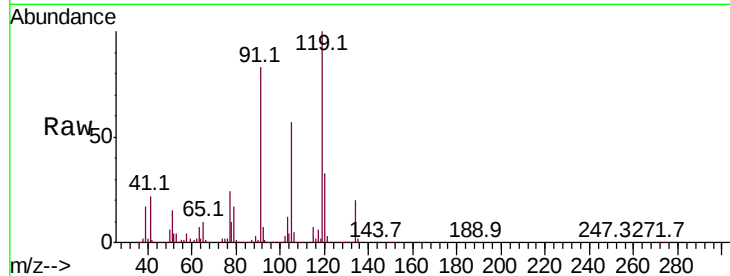
Tot Ion: 119 Resp: 4612733

Ion Ratio Lower Upper

119 100

91 83.5 66.5 99.7

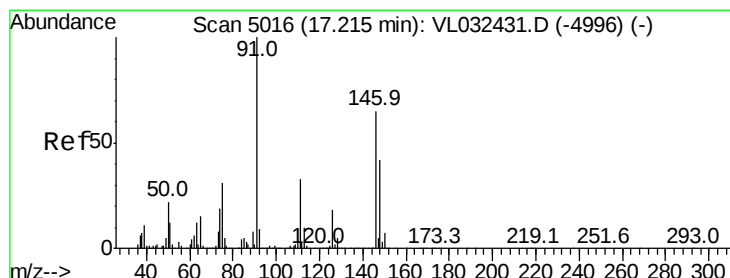
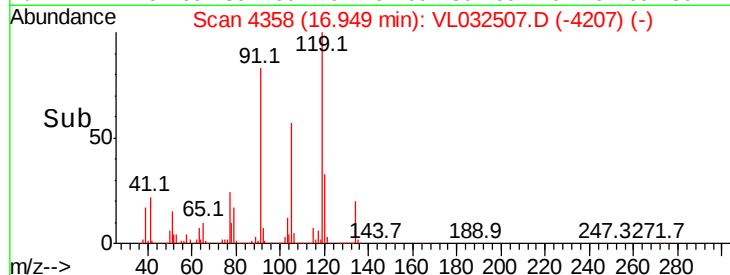
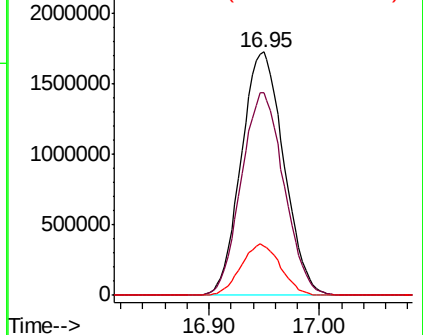
134 19.6 16.0 24.0



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 9.412 ppbv

RT: 17.20 min Scan# 4435

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

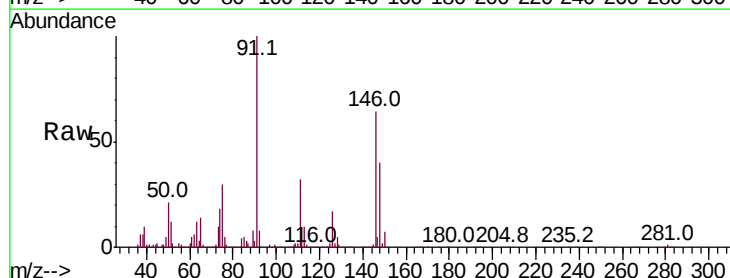
Tgt Ion: 91 Resp: 3003454

Ion Ratio Lower Upper

91 100

126 17.3 13.8 20.8

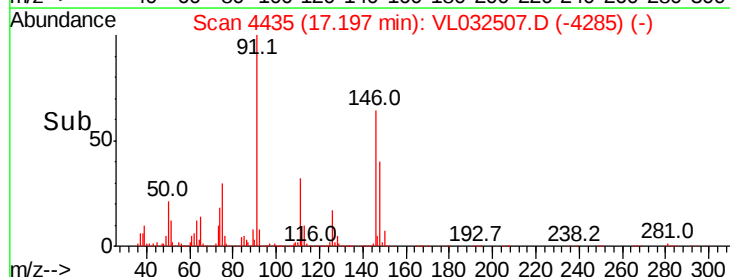
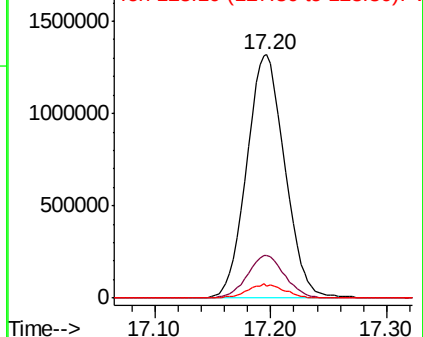
128 5.5 4.4 6.6

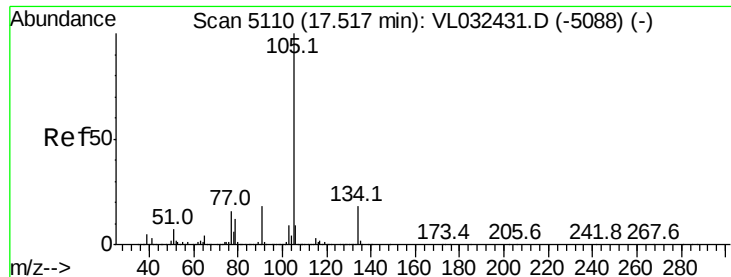


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#67

sec-Butylbenzene

Concen: 7.931 ppbv

RT: 17.50 min Scan# 4529

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

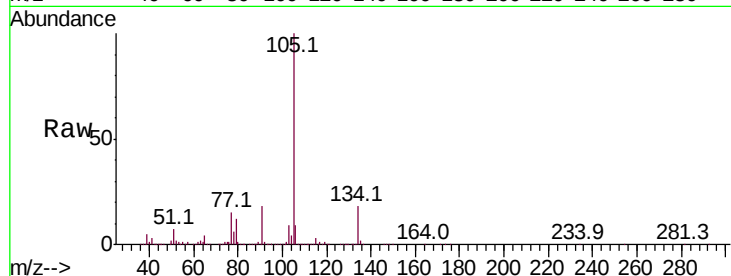
ClientSampleId :

Tot Ion:105 Resp: 6832306

Ion Ratio Lower Upper

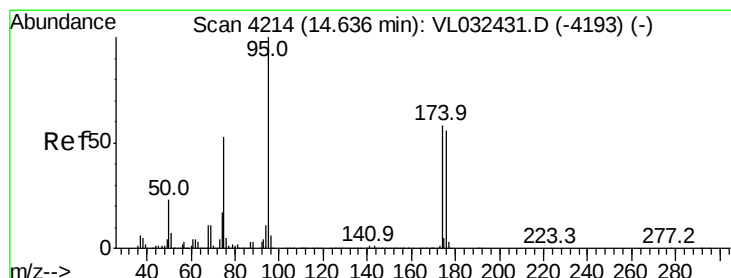
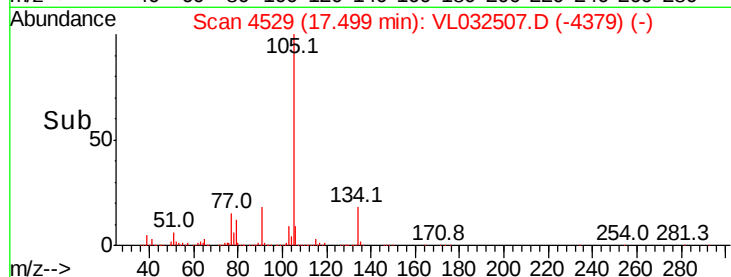
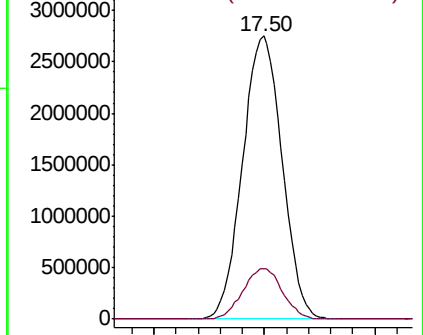
105 100

134 17.9 14.4 21.6



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: 8.302 ppbv

RT: 14.61 min Scan# 3632

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

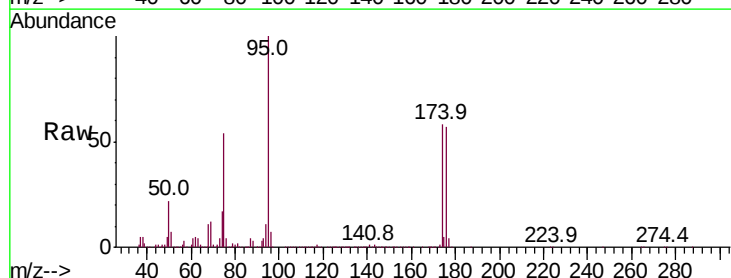
Tgt Ion: 95 Resp: 2781272

Ion Ratio Lower Upper

95 100

174 57.7 46.3 69.5

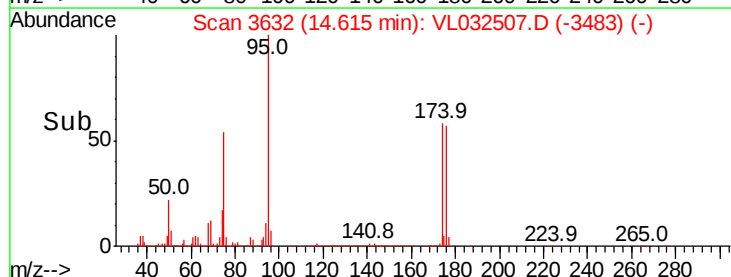
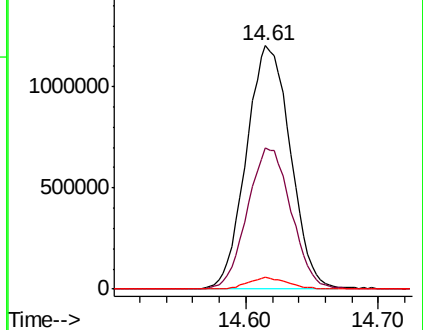
175 4.3 3.4 5.0

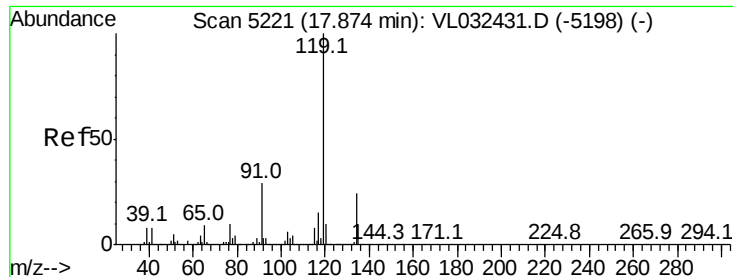


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

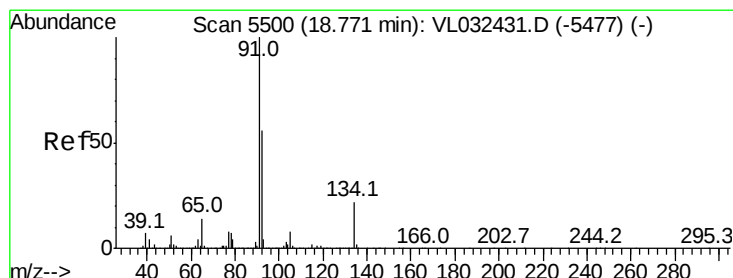
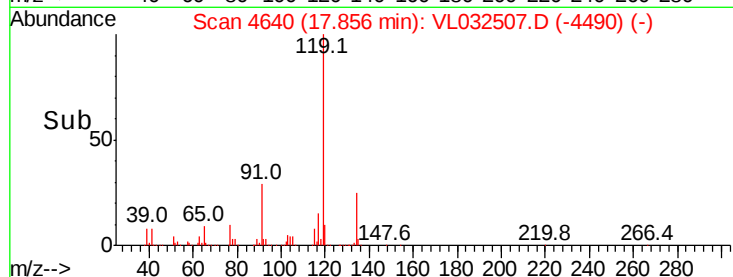
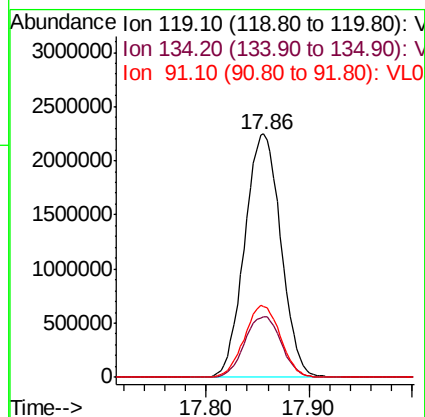
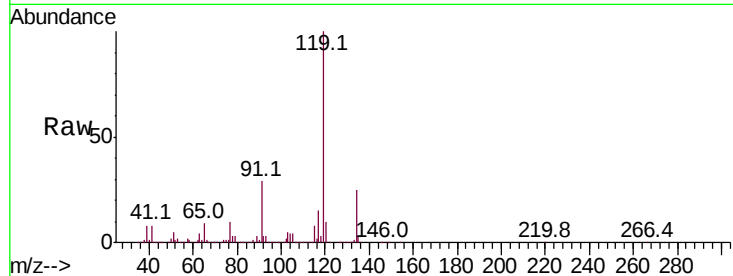




#69  
p-Isopropyltoluene  
Concen: 8.215 ppbv  
RT: 17.86 min Scan# 4640  
Delta R.T. -0.02 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

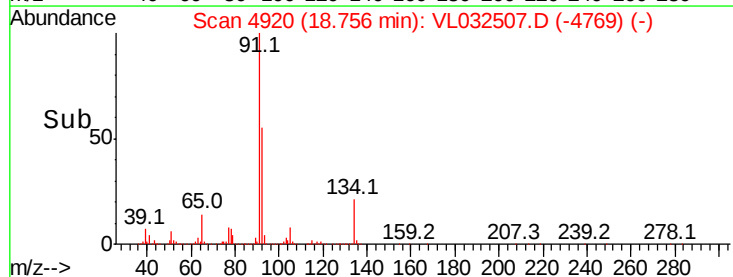
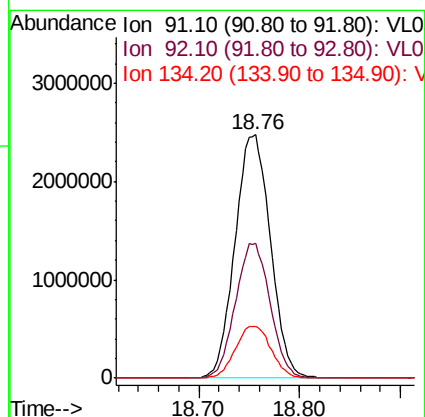
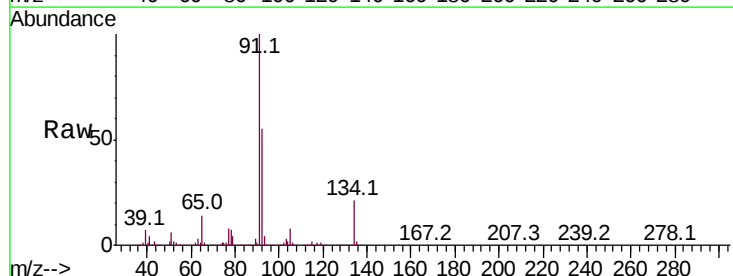
Instrument :  
MSVOA\_L  
ClientSampled :

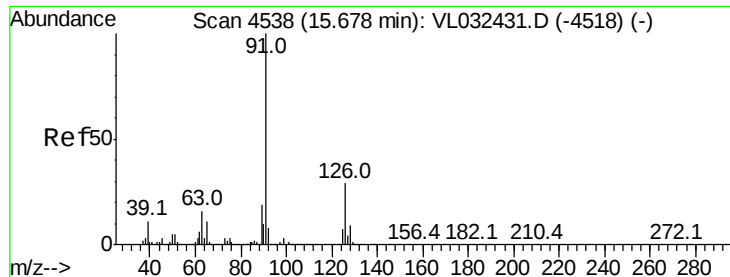
Tot Ion:119 Resp: 5484782  
Ion Ratio Lower Upper  
119 100  
134 25.3 20.4 30.6  
91 29.2 23.4 35.2



#70  
n-Butylbenzene  
Concen: 7.963 ppbv  
RT: 18.76 min Scan# 4920  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion: 91 Resp: 6026398  
Ion Ratio Lower Upper  
91 100  
92 54.3 43.8 65.8  
134 21.6 17.4 26.0





#71

2-Chlorotoluene

Concen: 8.637 ppbv

RT: 15.66 min Scan# 3956

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

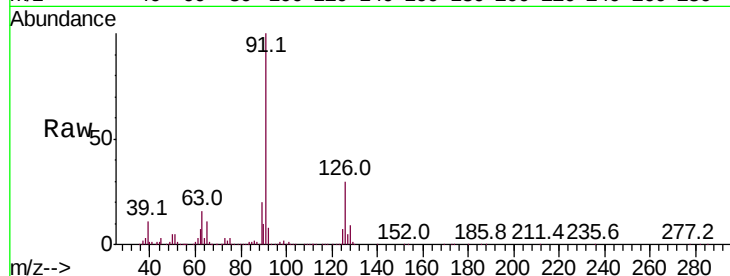
ClientSampleId :

Tot Ion: 91 Resp: 4386201

Ion Ratio Lower Upper

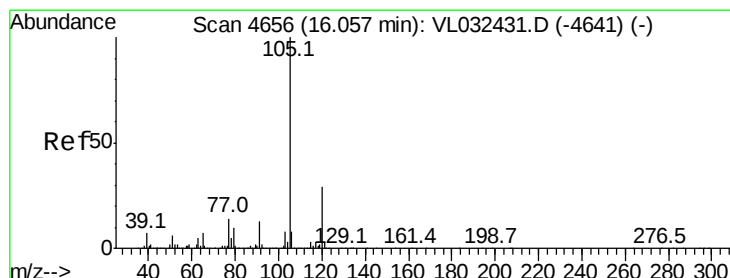
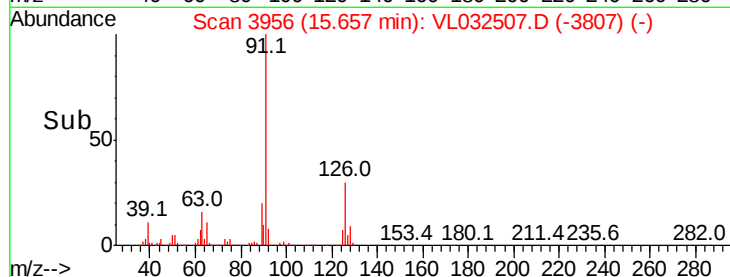
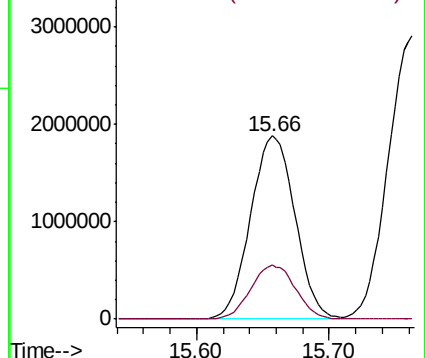
91 100

126 29.7 11.9 47.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 8.884 ppbv

RT: 16.04 min Scan# 4075

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Tgt Ion:105 Resp: 4586621

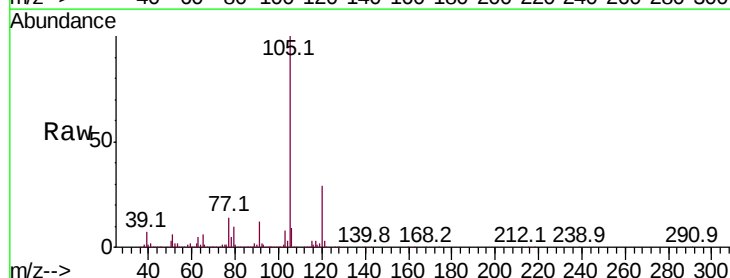
Ion Ratio Lower Upper

105 100

120 29.0 23.5 35.3

91 13.0 10.2 15.2

77 13.9 11.1 16.7

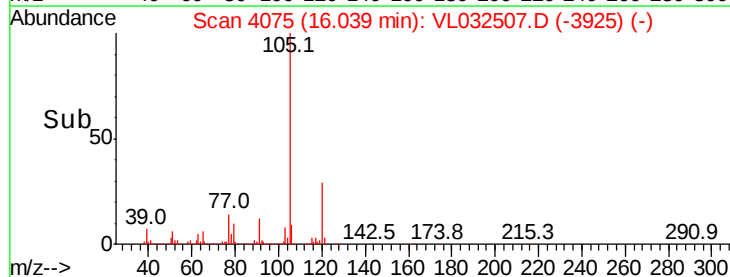
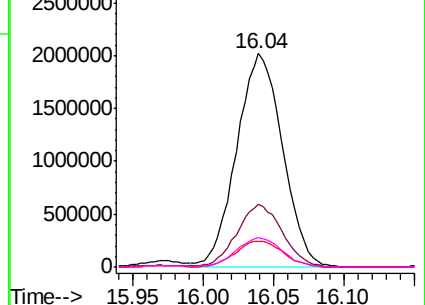


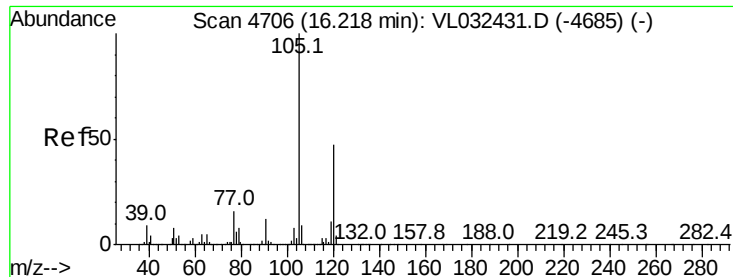
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



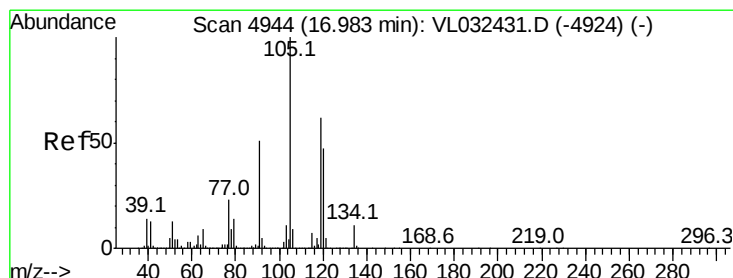
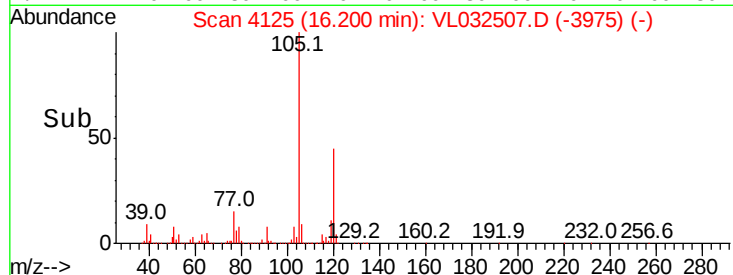
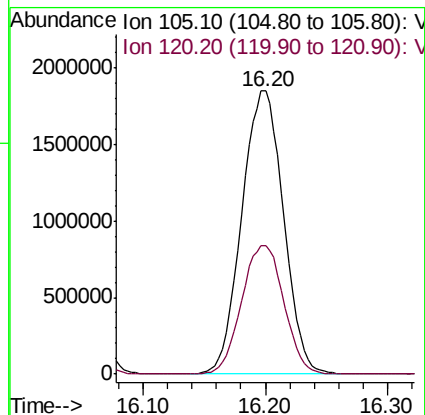
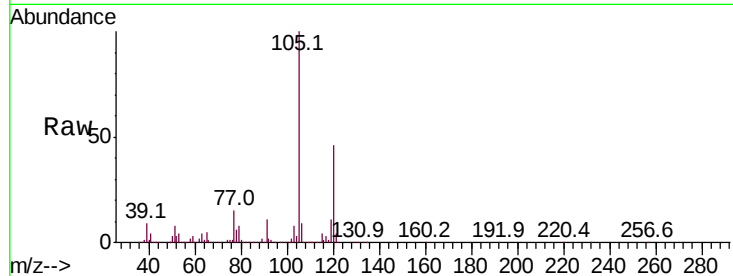


#73

1,3,5-Trimethylbenzene  
Concen: 8.406 ppbv  
RT: 16.20 min Scan# 4125  
Delta R.T. -0.02 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Instrument :  
MSVOA\_L  
ClientSampleId :

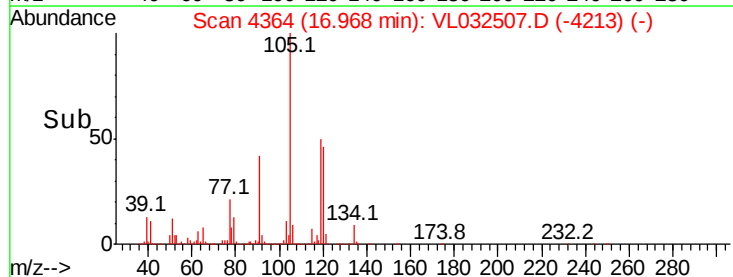
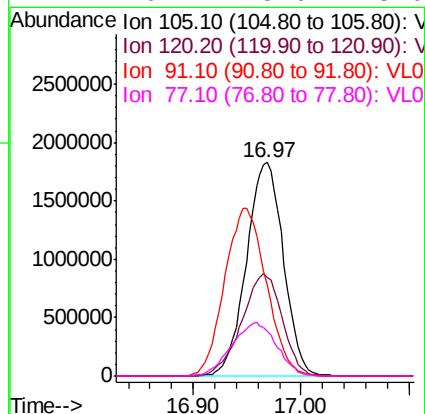
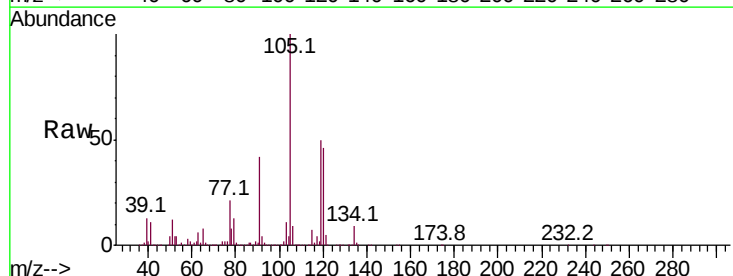
Tot Ion:105 Resp: 4348130  
Ion Ratio Lower Upper  
105 100  
120 45.6 37.9 56.9

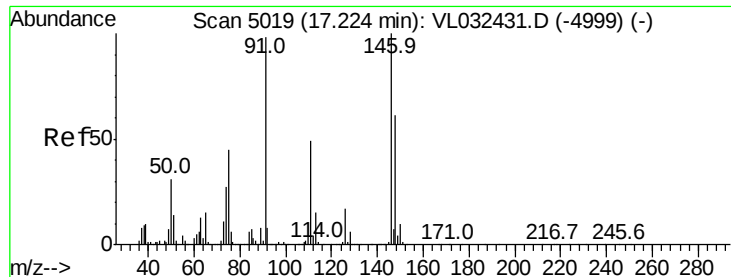


#74

1,2,4-Trimethylbenzene  
Concen: 7.688 ppbv  
RT: 16.97 min Scan# 4364  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion:105 Resp: 4347381  
Ion Ratio Lower Upper  
105 100  
120 46.2 37.8 56.8  
91 42.3 41.4 62.0  
77 20.7 18.6 28.0





#75

1,3-Dichlorobenzene

Concen: 7.240 ppbv

RT: 17.21 min Scan# 4439

Delta R.T. -0.01 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

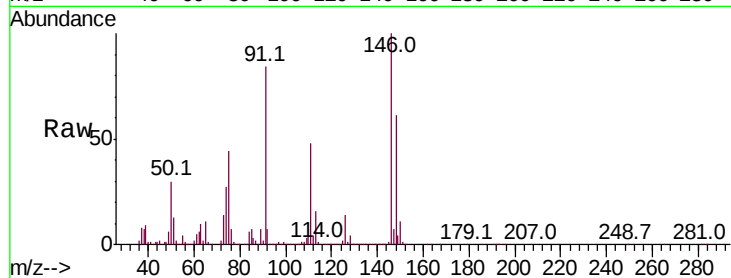
Tot Ion:146 Resp: 2429194

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 48.6  | 24.5  | 73.5  |
| 148 | 63.5  | 32.0  | 96.2  |

146 100

111 48.6 24.5 73.5

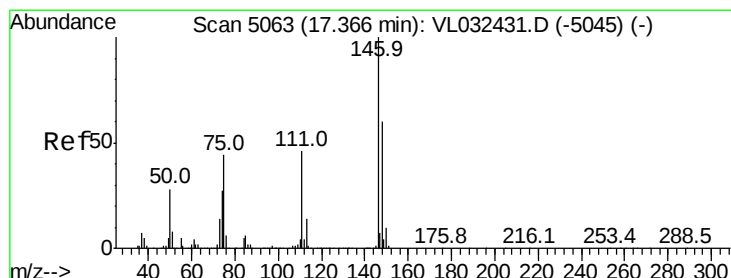
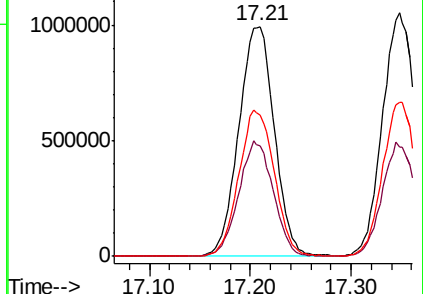
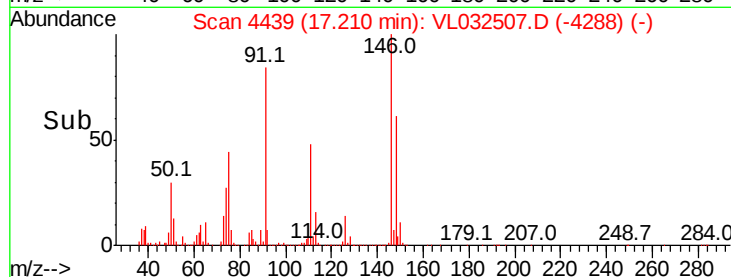
148 63.5 32.0 96.2



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



#76

1,4-Dichlorobenzene

Concen: 7.849 ppbv

RT: 17.35 min Scan# 4482

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

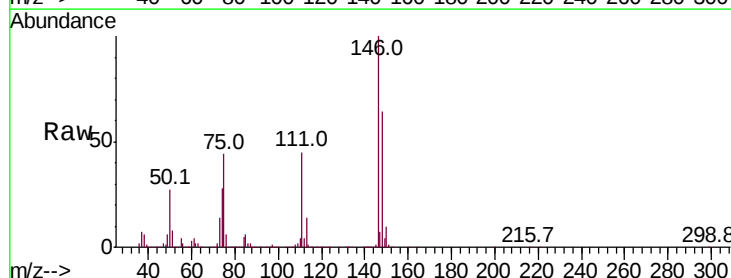
Tgt Ion:146 Resp: 2443610

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 146 | 100   |       |       |
| 111 | 46.8  | 23.4  | 70.2  |
| 148 | 64.6  | 32.0  | 96.2  |

146 100

111 46.8 23.4 70.2

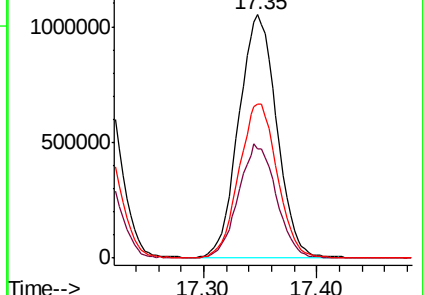
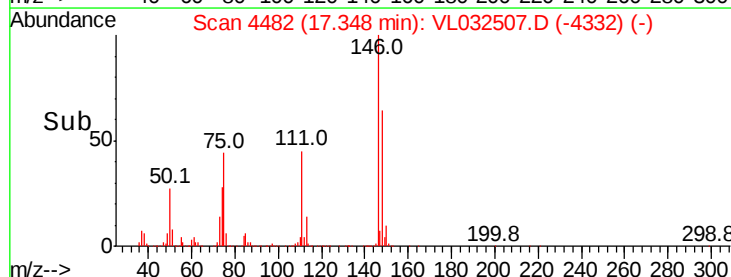
148 64.6 32.0 96.2

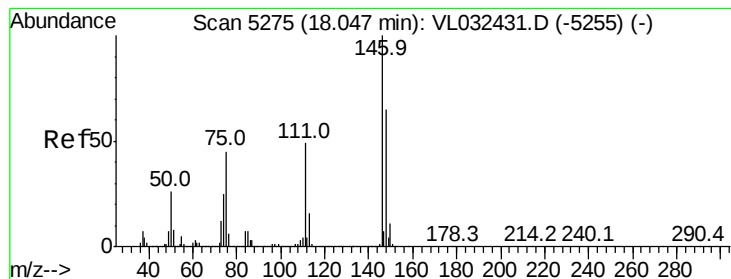


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 7.435 ppbv

RT: 18.03 min Scan# 4693

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

Instrument :

MSVOA\_L

ClientSampleId :

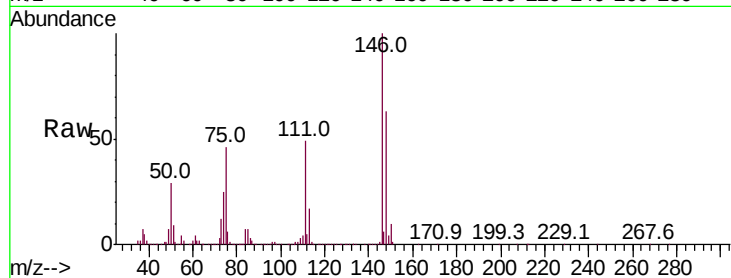
Tot Ion:146 Resp: 2406961

Ion Ratio Lower Upper

146 100

111 50.2 24.9 74.8

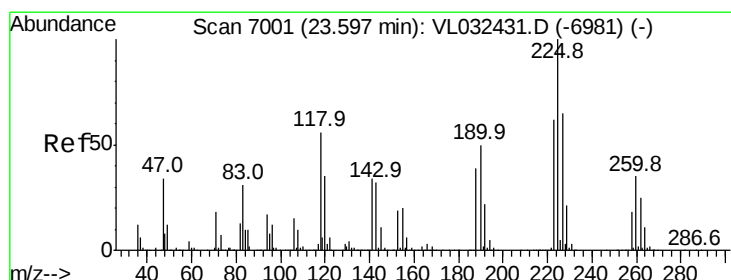
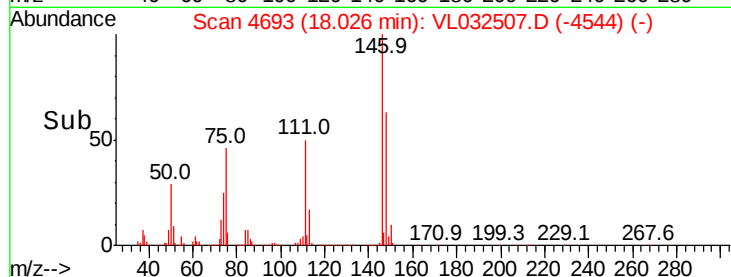
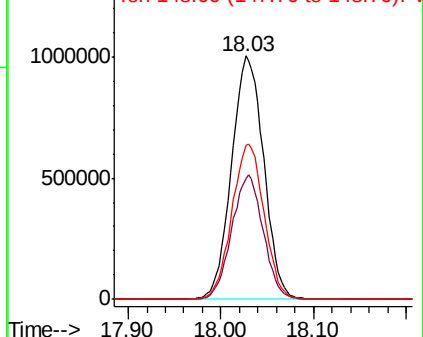
148 64.1 32.0 96.0



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#78

Hexachloro-1,3-Butadiene

Concen: 12.212 ppbv

RT: 23.58 min Scan# 6419

Delta R.T. -0.02 min

Lab File: VL032507.D

Acq: 20 Sep 2018 13:32

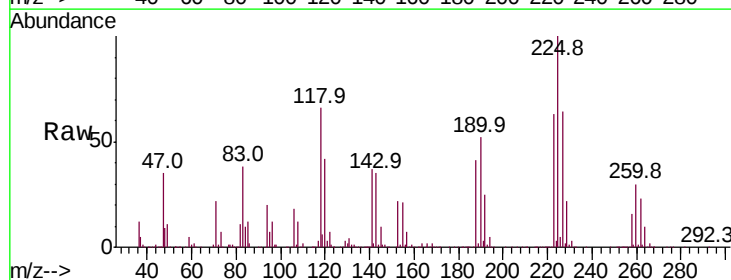
Tgt Ion:225 Resp: 1477206

Ion Ratio Lower Upper

225 100

223 63.9 50.6 76.0

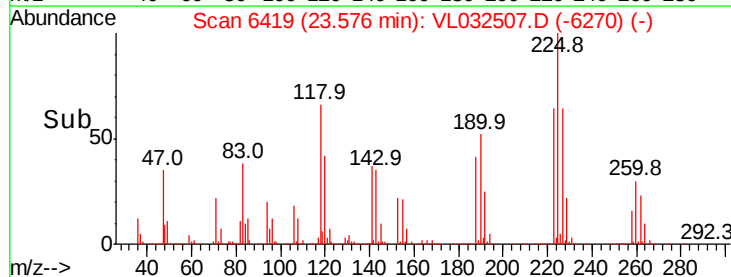
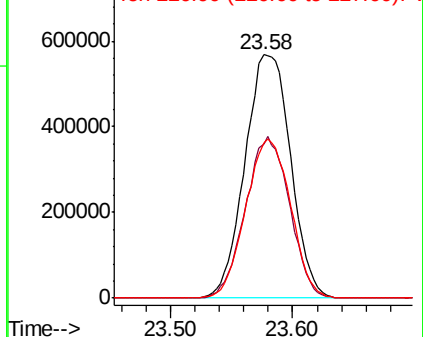
227 64.1 51.2 76.8

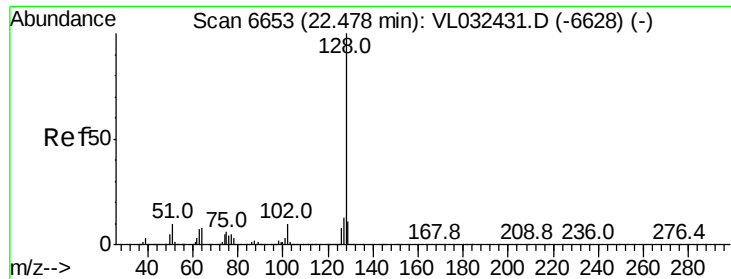


Abundance Ion 224.90 (224.60 to 225.60): V

Ion 222.90 (222.60 to 223.60): V

Ion 226.90 (226.60 to 227.60): V

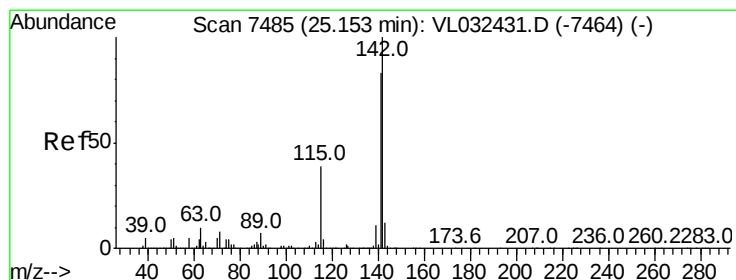
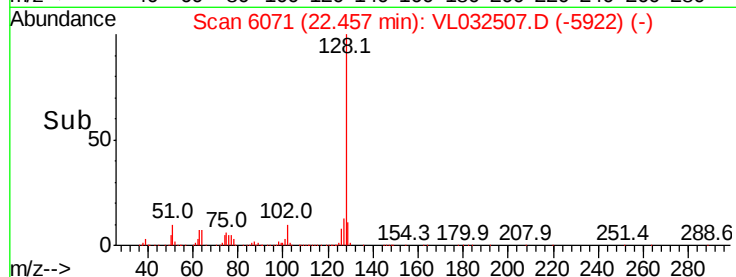
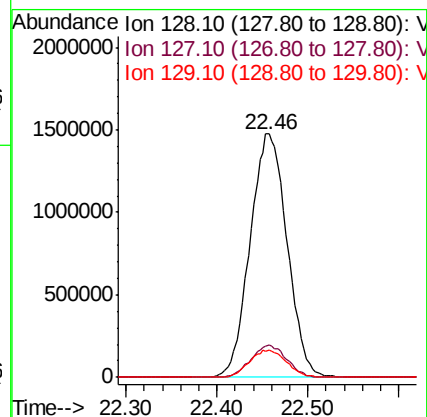
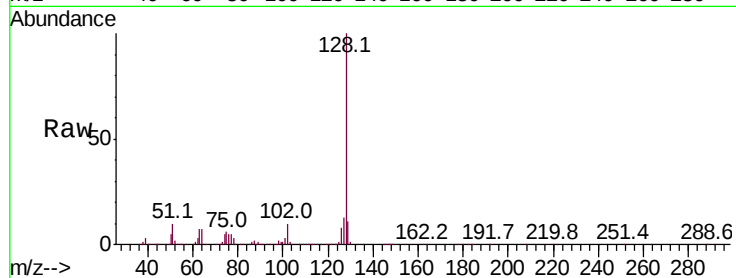




#79  
Naphthalene  
Concen: 9.043 ppbv  
RT: 22.46 min Scan# 6071  
Delta R.T. -0.02 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

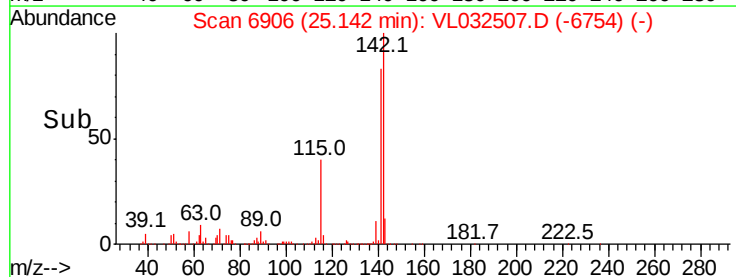
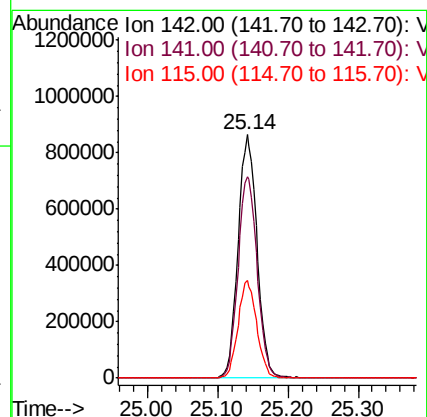
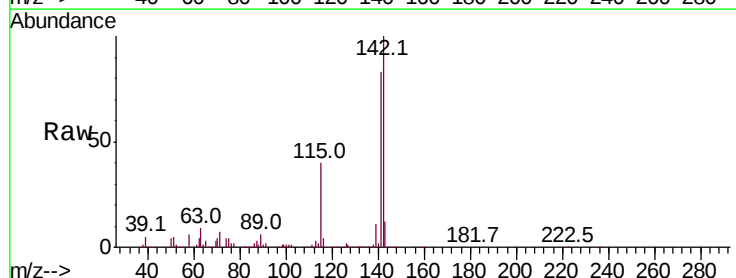
Instrument :  
MSVOA\_L  
ClientSampleId :

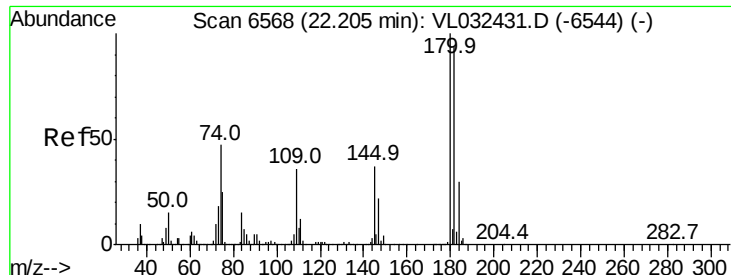
Tot Ion:128 Resp: 4158570  
Ion Ratio Lower Upper  
128 100  
127 13.1 10.2 15.2  
129 11.1 8.5 12.7



#80  
Naphthalene, 2-methyl-  
Concen: 13.319 ppbv  
RT: 25.14 min Scan# 6906  
Delta R.T. -0.01 min  
Lab File: VL032507.D  
Acq: 20 Sep 2018 13:32

Tgt Ion:142 Resp: 1629645  
Ion Ratio Lower Upper  
142 100  
141 83.8 67.0 100.6  
115 39.4 31.3 46.9

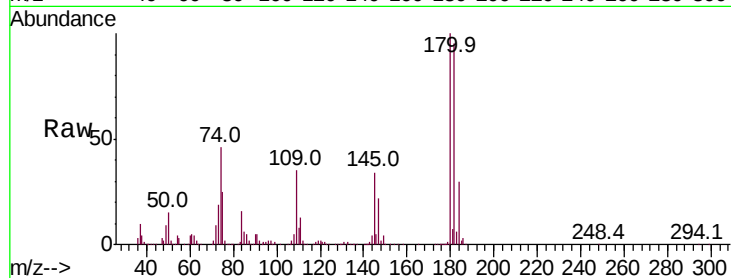




#81  
 1,2,4-Trichlorobenzene  
 Concen: 8.574 ppbv  
 RT: 22.18 min Scan# 5986  
 Delta R.T. -0.02 min  
 Lab File: VL032507.D  
 Acq: 20 Sep 2018 13:32

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Tot Ion:180 Resp: 1985719  
 Ion Ratio Lower Upper  
 180 100  
 182 95.9 76.1 114.1  
 184 30.6 23.8 35.8



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V

