

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL031519\  
 Data File : VL033318.D  
 Acq On : 15 Mar 2019 3:36  
 Operator : SY/AP  
 Sample : VSTDIC002  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

Quant Time: Mar 15 04:24:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031419AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Mar 15 04:20:36 2019  
 QLast Update : Fri Mar 15 04:20:36 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 904169   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 2096670  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 2319090  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.58  | 95    | 1664967  | 9.39     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 93.90% |

| Target Compounds               |      |     |        |       |        | Qvalue |
|--------------------------------|------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.08 | 85  | 279728 | 1.754 | ppbv   | 98     |
| 3) Chlorodifluoromethane       | 3.01 | 51  | 209844 | 1.824 | ppbv   | 99     |
| 4) Chloromethane               | 3.17 | 50  | 113912 | 1.835 | ppbv   | 92     |
| 5) Vinyl Chloride              | 3.29 | 62  | 108974 | 1.732 | ppbv   | 99     |
| 6) Bromomethane                | 3.52 | 94  | 68123  | 1.809 | ppbv   | 97     |
| 7) Chloroethane                | 3.60 | 64  | 40842  | 1.830 | ppbv   | 93     |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85  | 280132 | 1.872 | ppbv   | 99     |
| 9) Propene                     | 3.04 | 41  | 94547  | 1.837 | ppbv   | 99     |
| 10) Heptane                    | 8.25 | 43  | 242309 | 1.898 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.00 | 101 | 314088 | 1.898 | ppbv   | 97     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.55 | 101 | 205590 | 1.842 | ppbv   | 99     |
| 13) Ethanol                    | 3.65 | 45  | 53895  | 3.339 | ppbv   | 100    |
| 14) Bromoethene                | 3.79 | 108 | 87087  | 1.871 | ppbv   | 98     |
| 15) Acetone                    | 3.90 | 43  | 328162 | 2.664 | ppbv   | 99     |
| 16) 1,3-Butadiene              | 3.36 | 39  | 94258  | 1.908 | ppbv   | 95     |
| 17) tert-Butyl alcohol         | 4.36 | 59  | 19702  | 0.919 | ppbv # | 73     |
| 18) 1,1-Dichloroethene         | 4.35 | 96  | 92676  | 1.894 | ppbv   | 93     |
| 19) Isopropyl Alcohol          | 4.03 | 45  | 127605 | 1.686 | ppbv # | 98     |
| 20) Methylene Chloride         | 4.41 | 84  | 94465  | 1.908 | ppbv   | 90     |
| 21) Allyl Chloride             | 4.48 | 41  | 139540 | 1.896 | ppbv   | 100    |
| 22) trans-1,2-Dichloroethene   | 4.97 | 96  | 88166  | 1.791 | ppbv   | 93     |
| 23) Vinyl Acetate              | 5.16 | 43  | 332394 | 1.905 | ppbv   | 98     |
| 24) 1,1-Dichloroethane         | 5.09 | 63  | 234239 | 1.858 | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.77 | 43  | 415463 | 1.870 | ppbv   | 100    |
| 26) Hexane                     | 5.78 | 57  | 189026 | 1.820 | ppbv   | 97     |
| 27) Carbon Disulfide           | 4.62 | 76  | 204913 | 1.856 | ppbv   | 96     |
| 28) Methyl tert-Butyl Ether    | 5.12 | 73  | 274903 | 1.885 | ppbv   | 99     |
| 29) Chloroform                 | 5.85 | 83  | 301184 | 1.858 | ppbv   | 98     |
| 30) Cyclohexane                | 7.25 | 84  | 152692 | 1.908 | ppbv   | 88     |
| 31) cis-1,2-Dichloroethene     | 5.64 | 61  | 183658 | 1.856 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.62 | 97  | 294242 | 1.859 | ppbv   | 99     |
| 34) 2-Butanone                 | 5.33 | 43  | 289922 | 2.053 | ppbv   | 100    |
| 35) Carbon Tetrachloride       | 7.13 | 117 | 307871 | 1.917 | ppbv   | 92     |
| 36) Benzene                    | 7.00 | 78  | 383828 | 1.891 | ppbv   | 98     |
| 37) 1,2-Dichloroethane         | 6.41 | 62  | 237863 | 1.938 | ppbv   | 99     |
| 38) Trichloroethene            | 7.96 | 130 | 85061  | 1.050 | ppbv   | 99     |
| 39) 1,2-Dichloropropane        | 7.73 | 63  | 143657 | 1.842 | ppbv   | 97     |
| 40) 1,4-Dioxane                | 7.97 | 88  | 24122  | 0.862 | ppbv # | 1      |
| 41) Tetrahydrofuran            | 6.16 | 42  | 149971 | 1.883 | ppbv   | 99     |
| 42) Bromodichloromethane       | 7.92 | 83  | 320925 | 1.866 | ppbv   | 96     |
| 43) Methyl Methacrylate        | 8.14 | 69  | 147987 | 1.829 | ppbv   | 97     |

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 Acq On : 15 Mar 2019 3:36  
 Operator : SY/AP  
 Sample : VSTDIC002  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

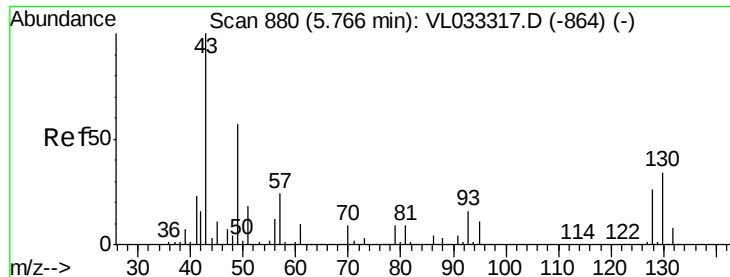
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

Quant Time: Mar 15 04:24:32 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031419AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Mar 15 04:20:36 2019  
 QLast Update : Fri Mar 15 04:20:36 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.99  | 57   | 653148   | 1.876 | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 9.42  | 75   | 177139   | 1.866 | ppbv   | 97       |
| 46) cis-1,3-Dichloropropene   | 8.84  | 75   | 210236   | 1.839 | ppbv   | 97       |
| 47) 1,1,2-Trichloroethane     | 9.61  | 97   | 155520   | 1.865 | ppbv   | 93       |
| 48) Dibromochloromethane      | 10.45 | 129  | 261799   | 1.859 | ppbv   | 100      |
| 49) Bromoform                 | 13.20 | 173  | 244526   | 2.049 | ppbv   | 98       |
| 50) 4-Methyl-2-Pentanone      | 8.88  | 43   | 409216   | 1.967 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.28 | 43   | 329990   | 2.061 | ppbv # | 98       |
| 52) Tetrachloroethene         | 11.37 | 164  | 141979   | 1.697 | ppbv   | 90       |
| 53) Toluene                   | 9.95  | 91   | 441098   | 1.900 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.76 | 107  | 241490   | 1.772 | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.28 | 131  | 214325   | 2.045 | ppbv # | 1        |
| 57) Chlorobenzene             | 12.30 | 112  | 378157   | 2.012 | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.87 | 91   | 674755   | 2.019 | ppbv   | 100      |
| 59) m/p-Xylene                | 13.15 | 91   | 378942   | 1.348 | ppbv # | 32       |
| 60) o-Xylene                  | 13.85 | 91   | 564749   | 2.076 | ppbv   | 100      |
| 61) Styrene                   | 13.69 | 104  | 393459   | 2.066 | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.83 | 105  | 784840   | 2.054 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.84 | 83   | 394278   | 2.013 | ppbv   | 100      |
| 64) n-propylbenzene           | 15.72 | 120  | 135898   | 1.430 | ppbv # | 8        |
| 65) tert-Butylbenzene         | 16.91 | 119  | 716348   | 2.214 | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.16 | 91   | 257553   | 1.960 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.46 | 105  | 1015083  | 2.177 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.82 | 119  | 833794   | 2.236 | ppbv   | 99       |
| 70) n-Butylbenzene            | 18.71 | 91   | 538612   | 1.379 | ppbv # | 39       |
| 71) 2-Chlorotoluene           | 15.62 | 91   | 609940   | 2.130 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 16.00 | 105  | 639333   | 2.184 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 16.16 | 105  | 631161   | 2.295 | ppbv   | 94       |
| 74) 1,2,4-Trimethylbenzene    | 16.93 | 105  | 664446   | 2.366 | ppbv   | 94       |
| 75) 1,3-Dichlorobenzene       | 17.16 | 146  | 389460   | 2.215 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.31 | 146  | 376331   | 2.191 | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.99 | 146  | 369252   | 2.150 | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.55 | 225  | 227137   | 1.926 | ppbv   | 99       |
| 79) Naphthalene               | 22.42 | 128  | 673738   | 2.951 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 25.12 | 142  | 389247   | 5.894 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 22.14 | 180  | 345184   | 2.657 | ppbv   | 99       |

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





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 879

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

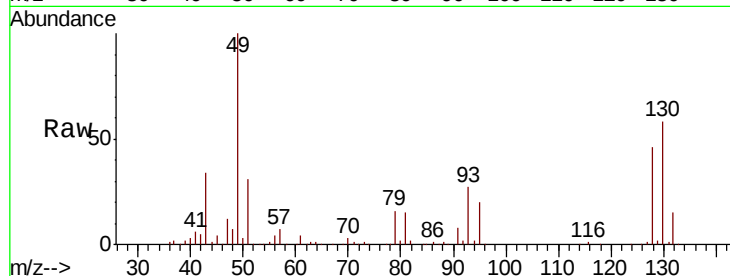
Tgt Ion: 49 Resp: 904169

Ion Ratio Lower Upper

49 100

128 46.8 23.2 69.6

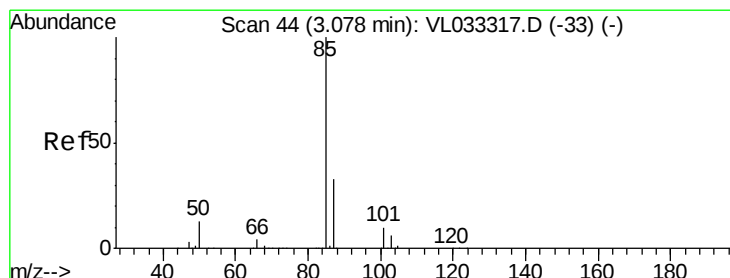
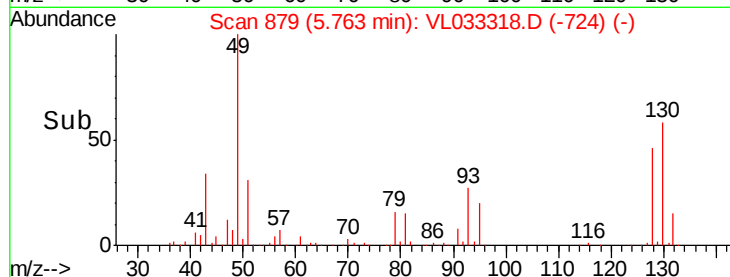
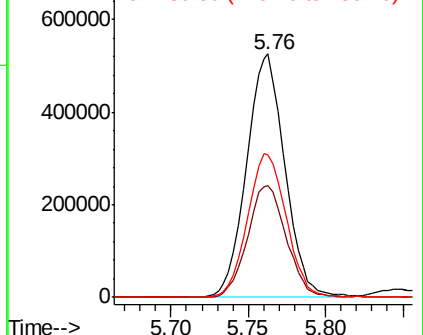
130 60.4 30.1 90.5



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 1.754 ppbv

RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033318.D

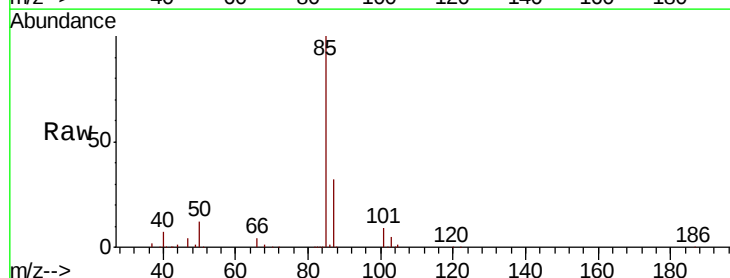
Acq: 15 Mar 2019 3:36

Tgt Ion: 85 Resp: 279728

Ion Ratio Lower Upper

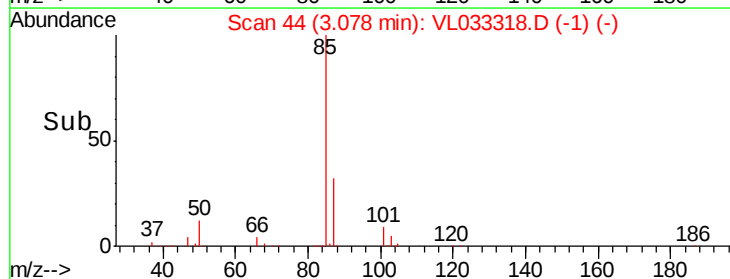
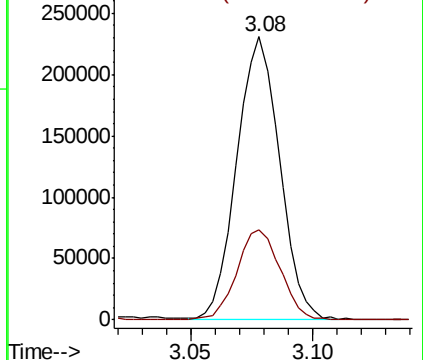
85 100

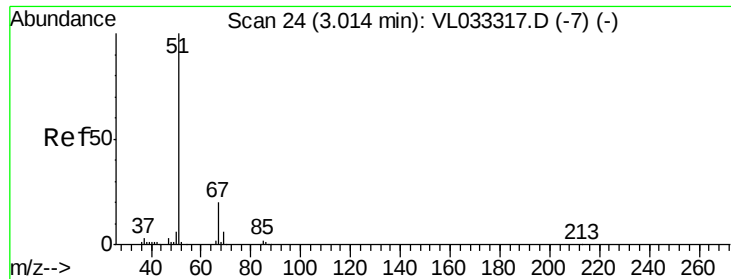
87 31.8 26.4 39.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

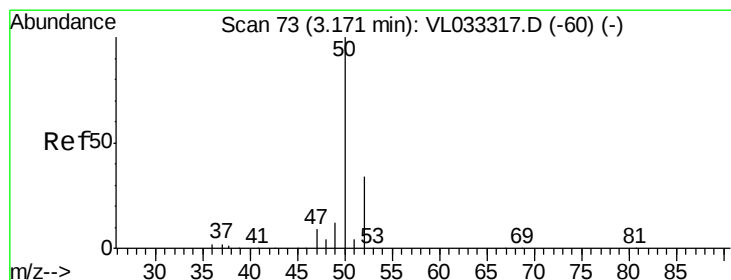
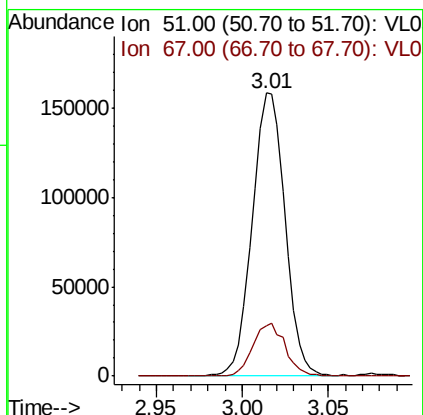
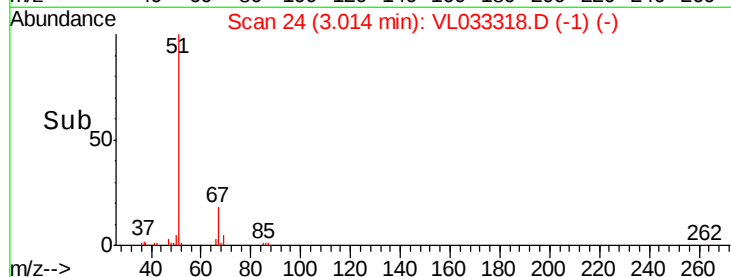
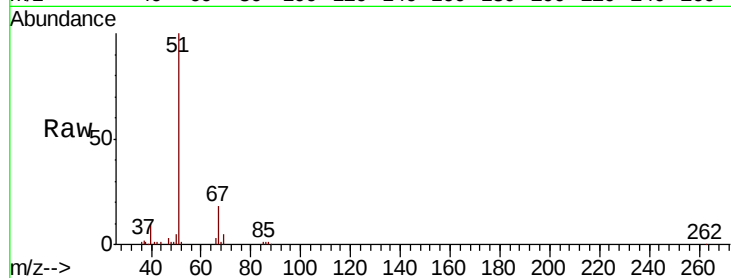




#3  
Chlorodifluoromethane  
Concen: 1.824 ppbv  
RT: 3.01 min Scan# 24  
Delta R.T. 0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

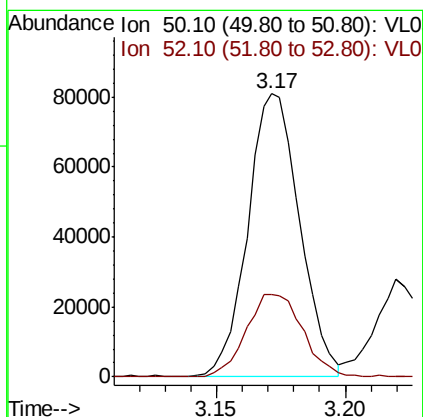
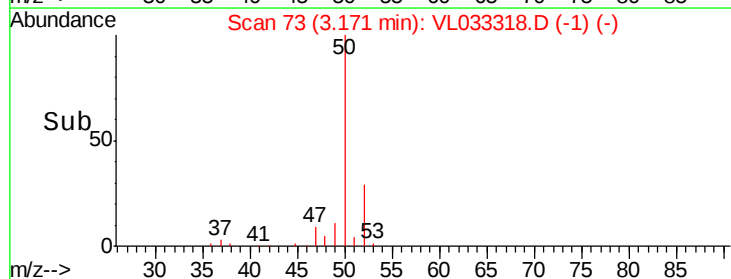
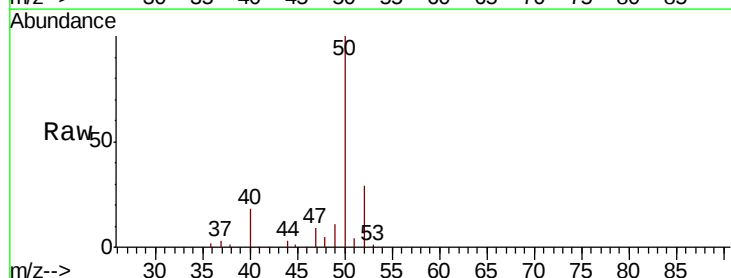
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

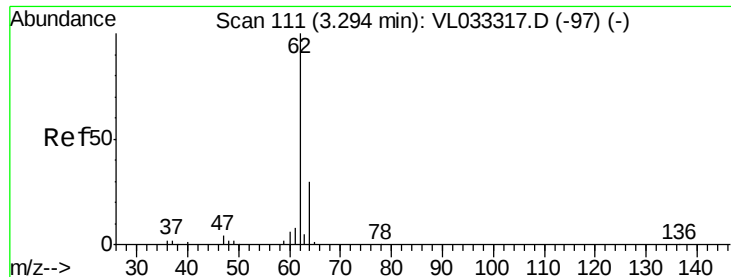
Tgt Ion: 51 Resp: 209844  
Ion Ratio Lower Upper  
51 100  
67 18.3 15.1 22.7



#4  
Chloromethane  
Concen: 1.835 ppbv  
RT: 3.17 min Scan# 73  
Delta R.T. 0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Tgt Ion: 50 Resp: 113912  
Ion Ratio Lower Upper  
50 100  
52 29.2 26.8 40.2





#5

Vinyl Chloride

Concen: 1.732 ppbv

RT: 3.29 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

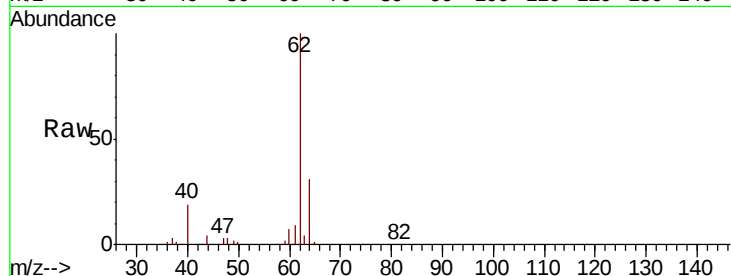
VSTDIC002

Tgt Ion: 62 Resp: 108974

Ion Ratio Lower Upper

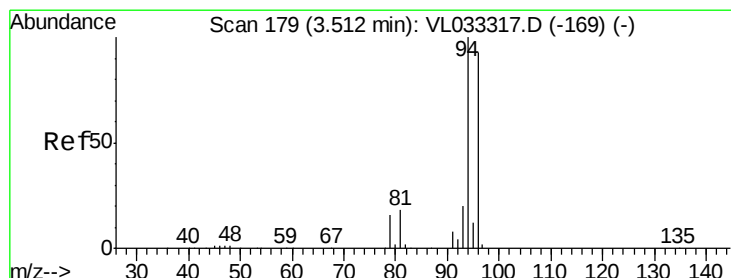
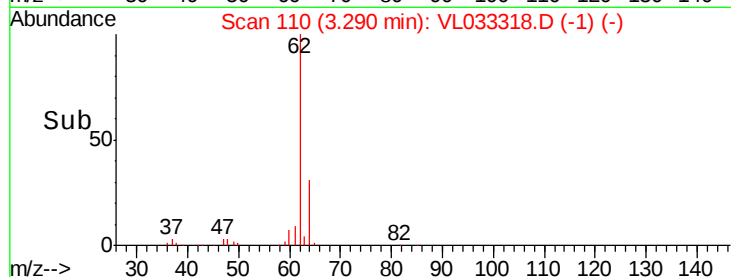
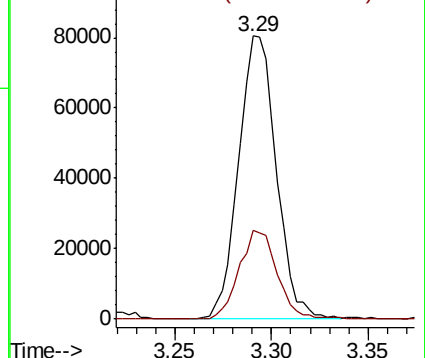
62 100

64 31.0 24.3 36.5



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0



#6

Bromomethane

Concen: 1.809 ppbv

RT: 3.52 min Scan# 180

Delta R.T. 0.00 min

Lab File: VL033318.D

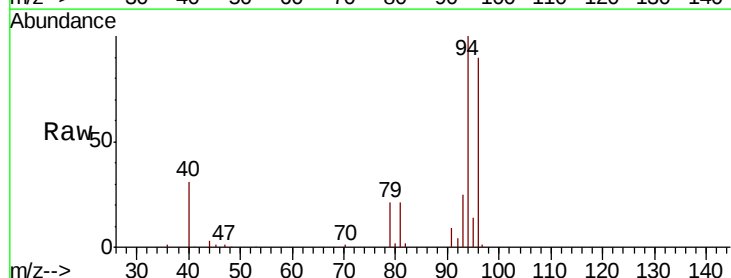
Acq: 15 Mar 2019 3:36

Tgt Ion: 94 Resp: 68123

Ion Ratio Lower Upper

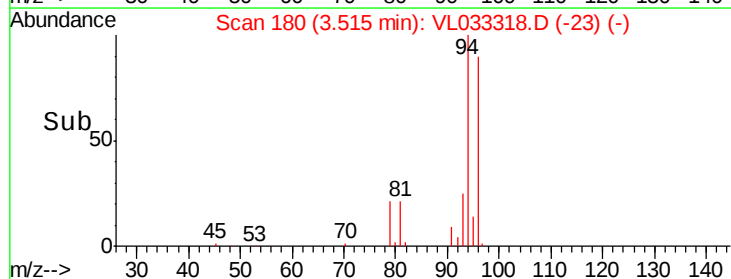
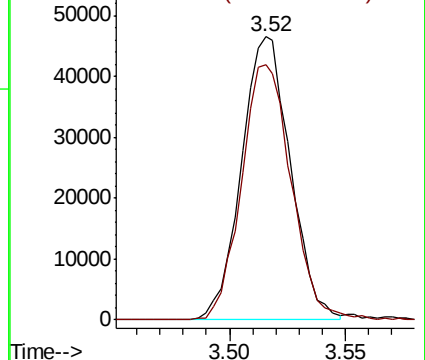
94 100

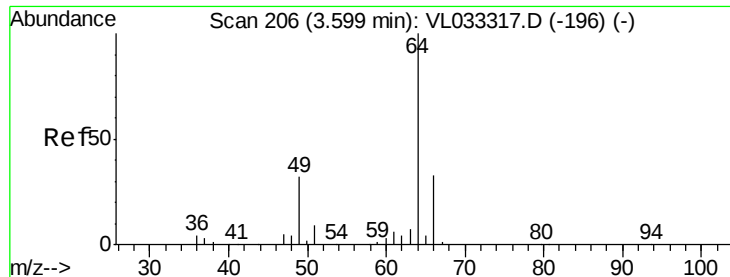
96 90.2 74.8 112.2



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#7

Chloroethane

Concen: 1.830 ppbv

RT: 3.60 min Scan# 207

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

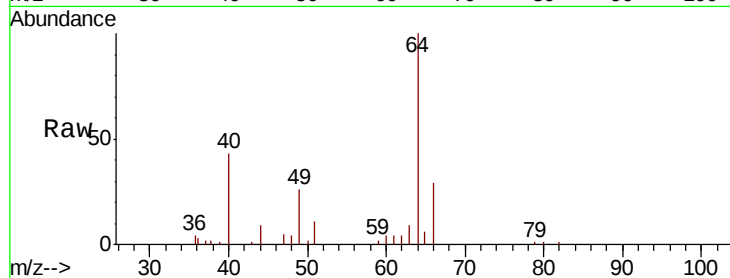
VSTDIC002

Tgt Ion: 64 Resp: 40842

Ion Ratio Lower Upper

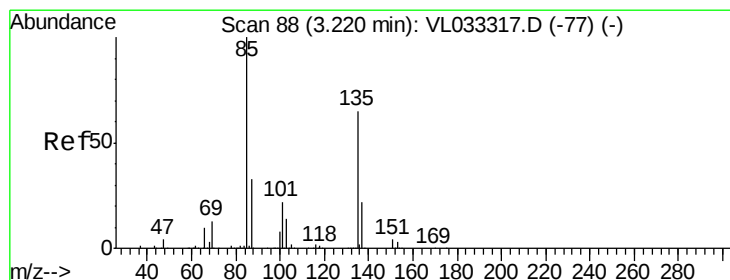
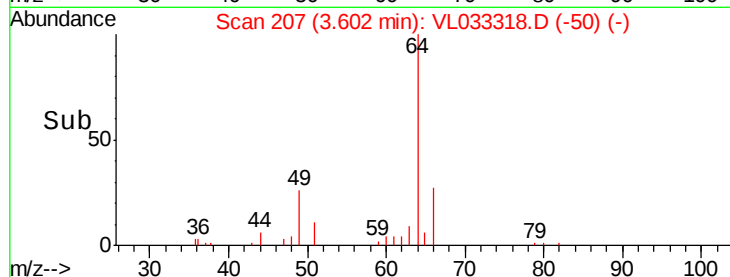
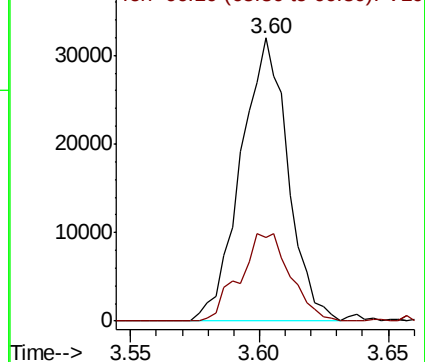
64 100

66 29.4 26.6 39.8



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 1.872 ppbv

RT: 3.22 min Scan# 88

Delta R.T. 0.00 min

Lab File: VL033318.D

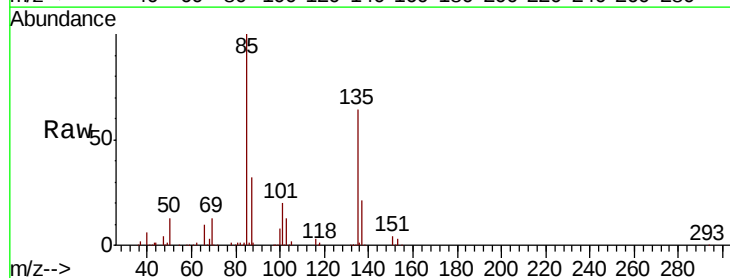
Acq: 15 Mar 2019 3:36

Tgt Ion: 85 Resp: 280132

Ion Ratio Lower Upper

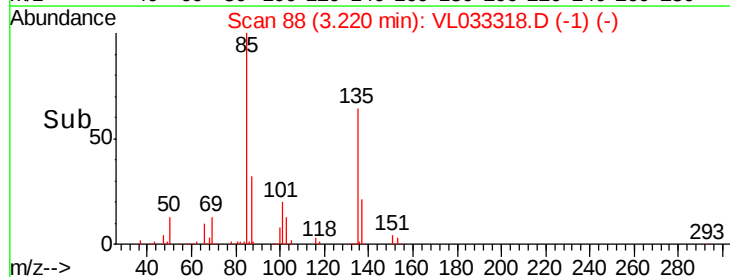
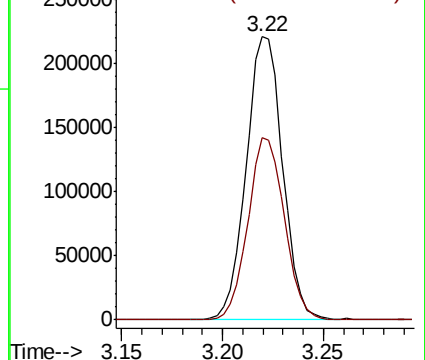
85 100

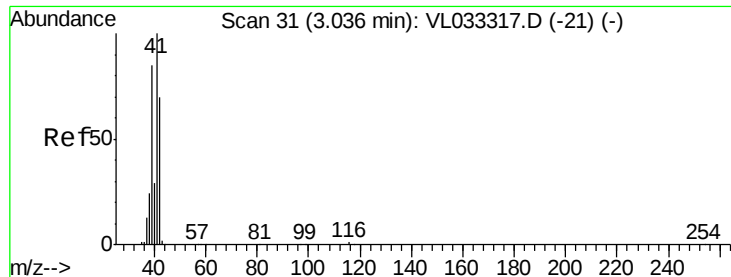
135 64.7 52.6 79.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 1.837 ppbv

RT: 3.04 min Scan# 31

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

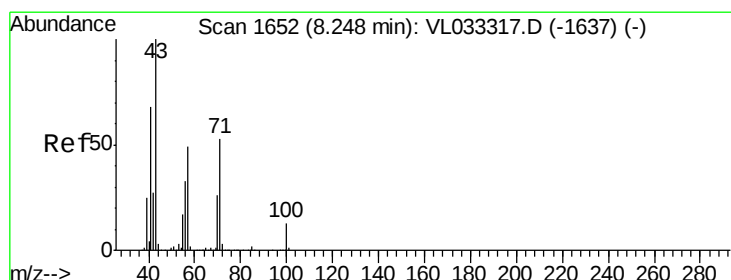
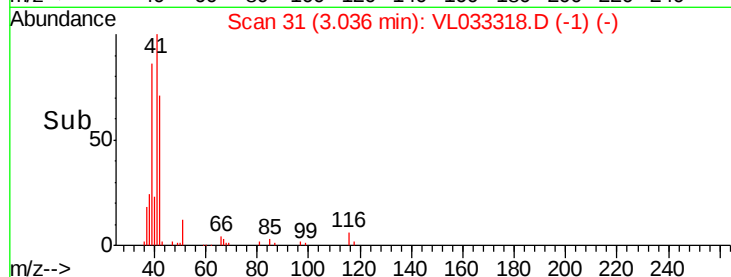
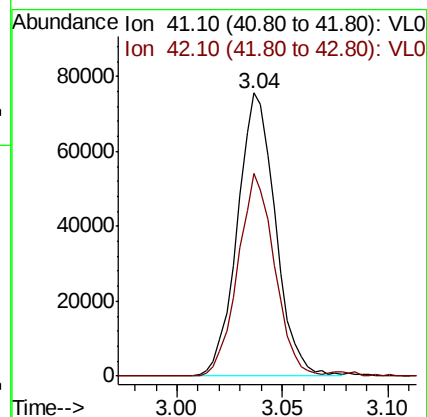
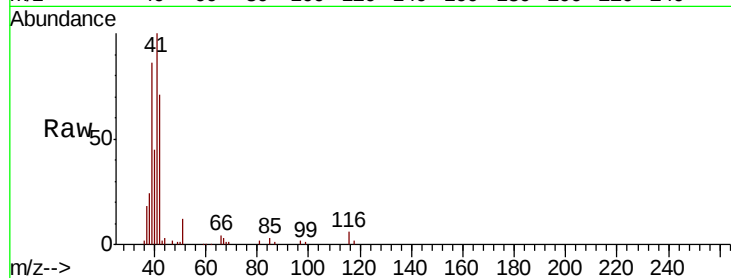
VSTDIC002

Tgt Ion: 41 Resp: 94547

Ion Ratio Lower Upper

41 100

42 70.5 55.5 83.3



#10

Heptane

Concen: 1.898 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. 0.00 min

Lab File: VL033318.D

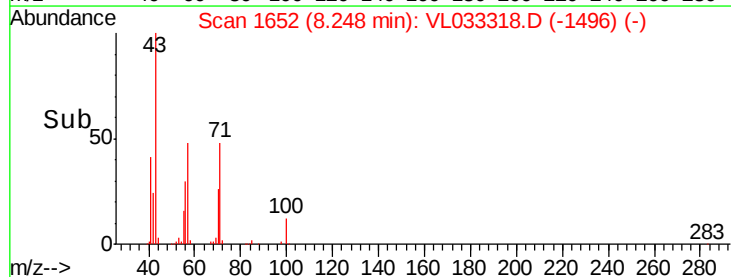
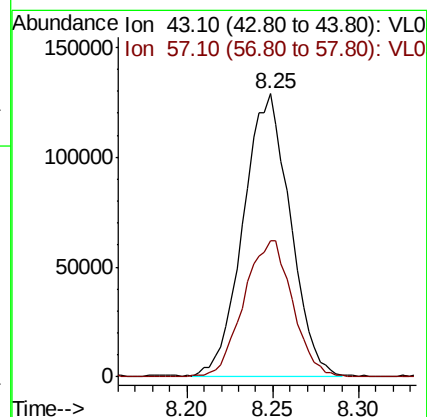
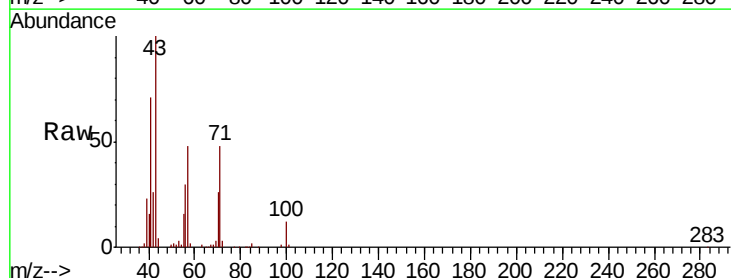
Acq: 15 Mar 2019 3:36

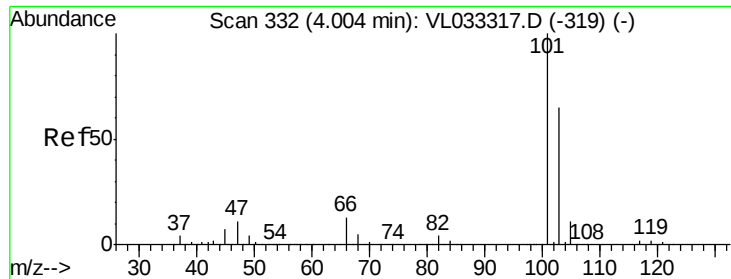
Tgt Ion: 43 Resp: 242309

Ion Ratio Lower Upper

43 100

57 50.2 40.6 61.0

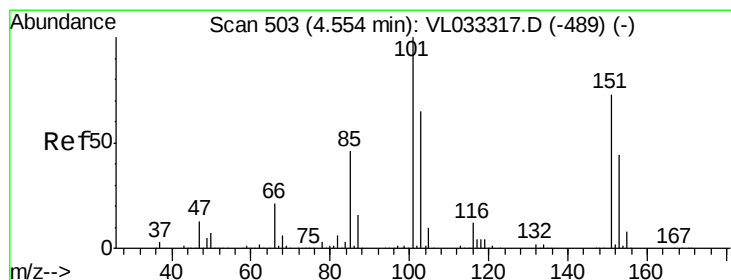
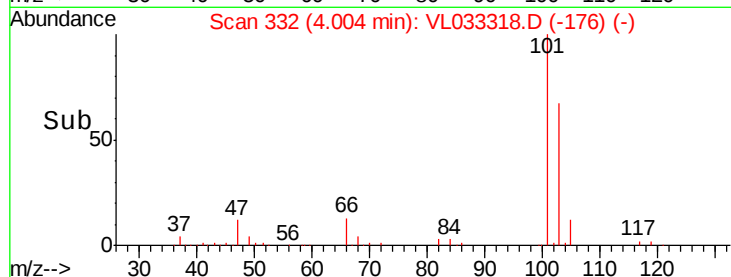
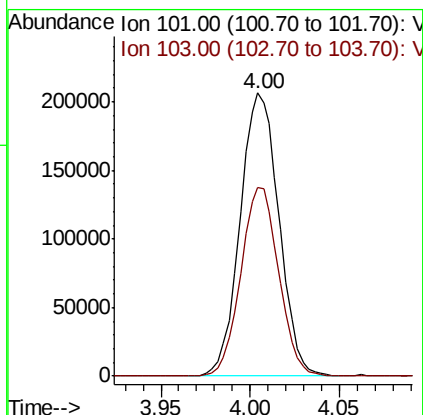
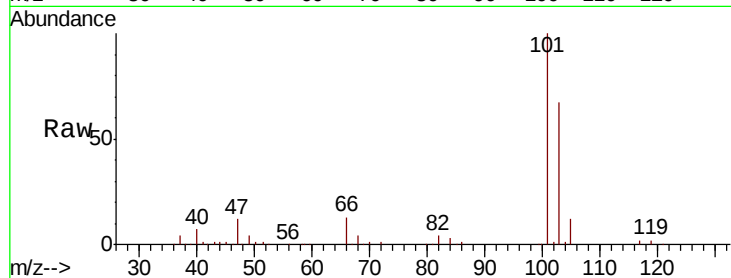




#11  
 Trichlorofluoromethane  
 Concen: 1.898 ppbv  
 RT: 4.00 min Scan# 332  
 Delta R.T. 0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

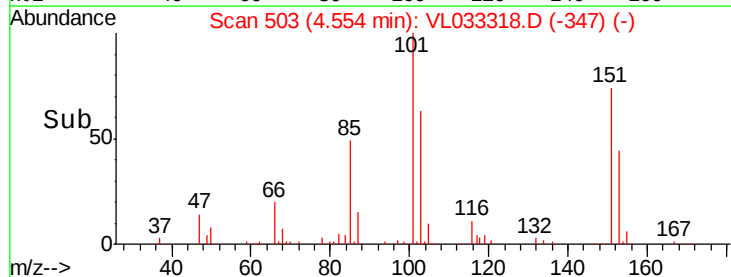
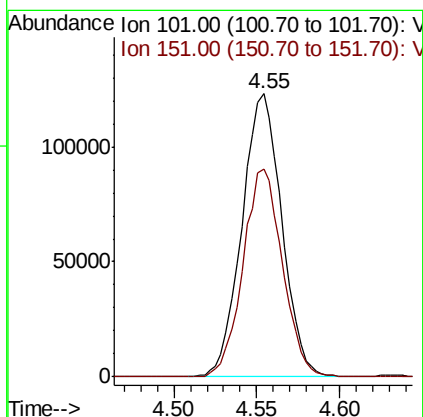
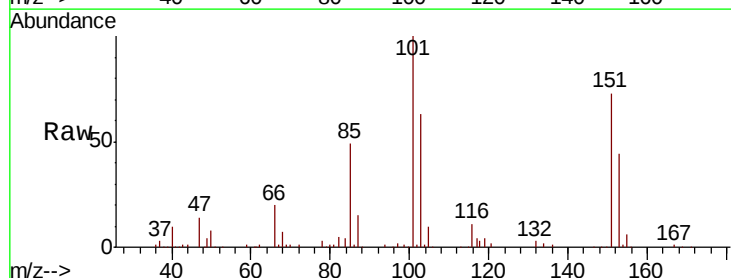
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

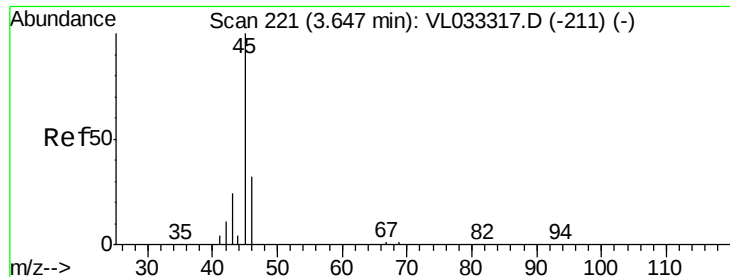
Tgt Ion:101 Resp: 314088  
 Ion Ratio Lower Upper  
 101 100  
 103 66.7 51.8 77.6



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 1.842 ppbv  
 RT: 4.55 min Scan# 503  
 Delta R.T. 0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion:101 Resp: 205590  
 Ion Ratio Lower Upper  
 101 100  
 151 72.5 57.2 85.8





#13

Ethanol

Concen: 3.339 ppbv

RT: 3.65 min Scan# 223

Delta R.T. 0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

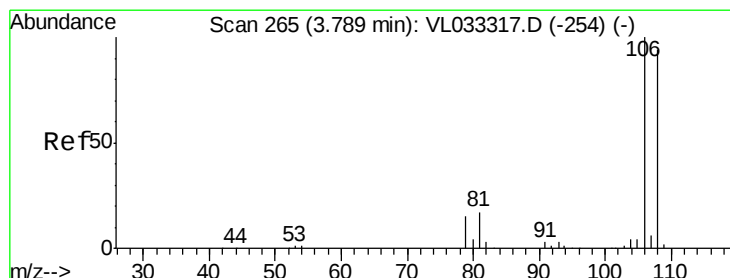
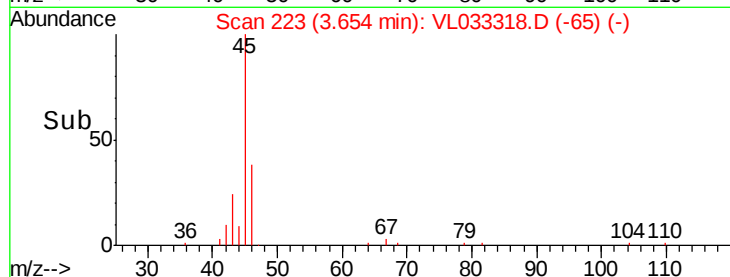
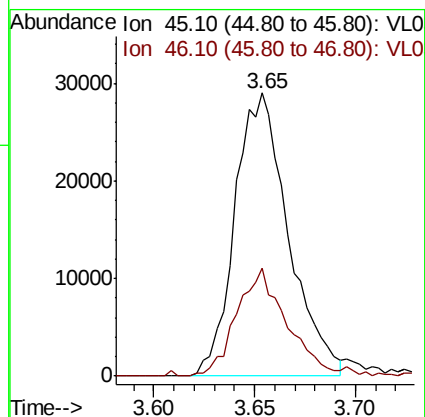
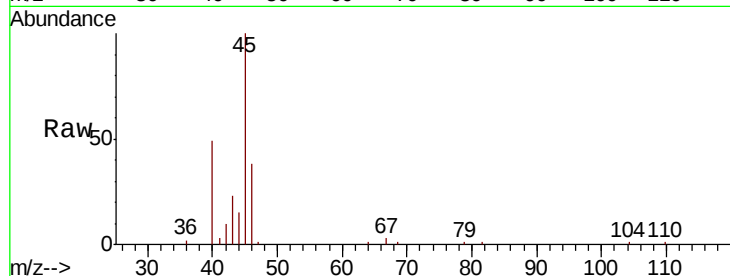
VSTDIC002

Tgt Ion: 45 Resp: 53895

Ion Ratio Lower Upper

45 100

46 37.0 14.7 58.9



#14

Bromoethene

Concen: 1.871 ppbv

RT: 3.79 min Scan# 265

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

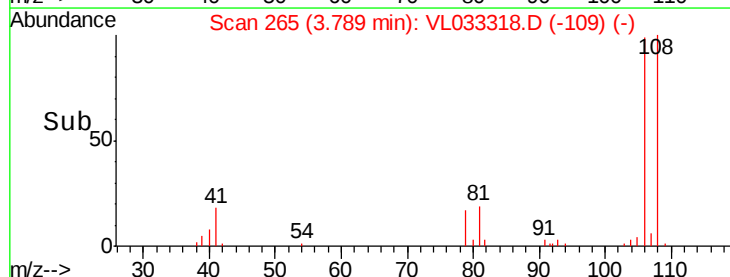
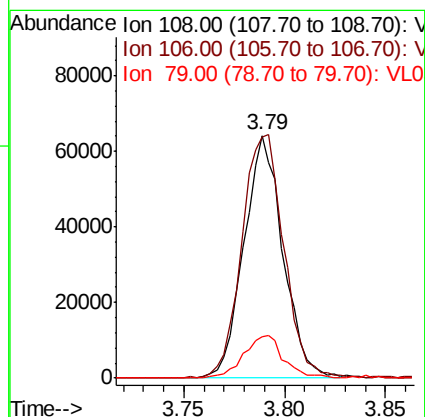
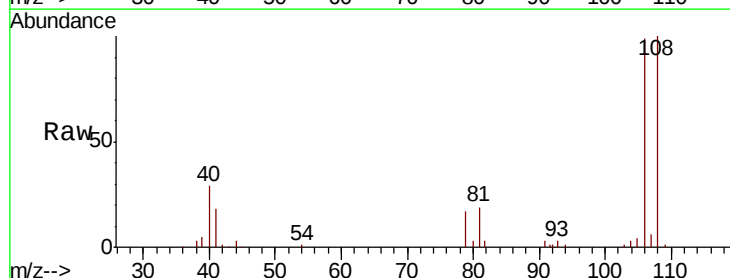
Tgt Ion: 108 Resp: 87087

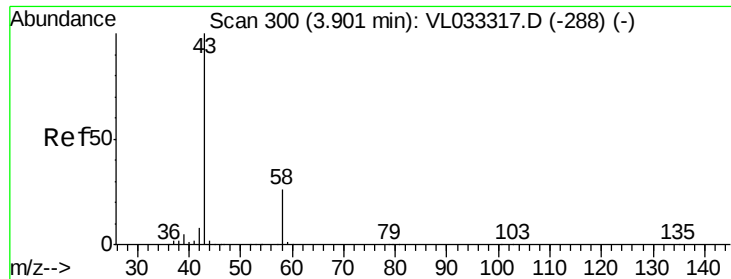
Ion Ratio Lower Upper

108 100

106 109.0 85.1 127.7

79 18.4 14.6 22.0





#15

Acetone

Concen: 2.664 ppbv

RT: 3.90 min Scan# 301

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

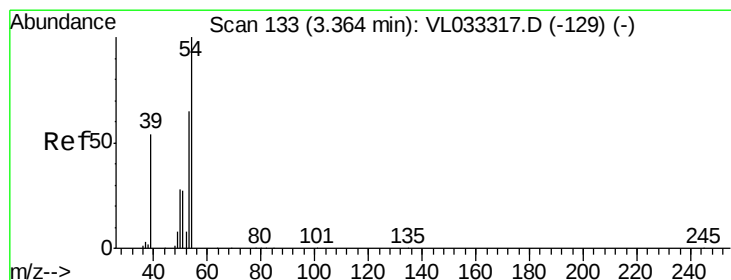
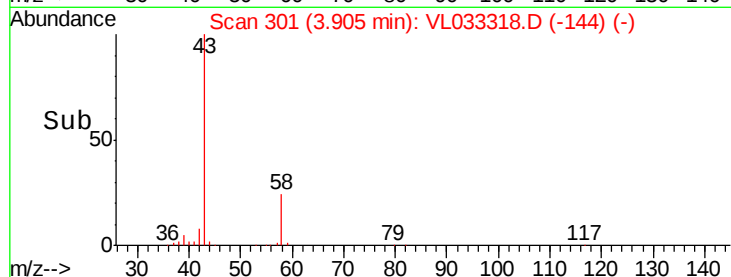
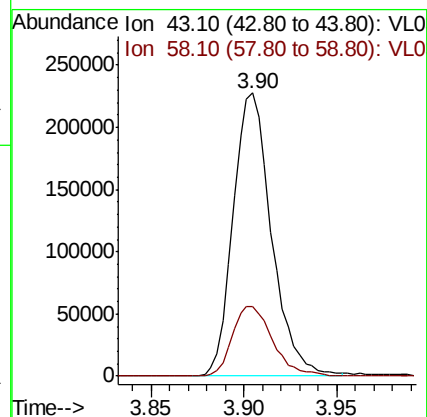
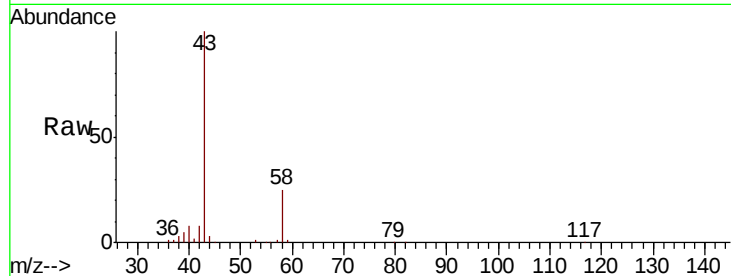
VSTDIC002

Tgt Ion: 43 Resp: 328162

Ion Ratio Lower Upper

43 100

58 26.0 20.3 30.5



#16

1,3-Butadiene

Concen: 1.908 ppbv

RT: 3.36 min Scan# 133

Delta R.T. 0.00 min

Lab File: VL033318.D

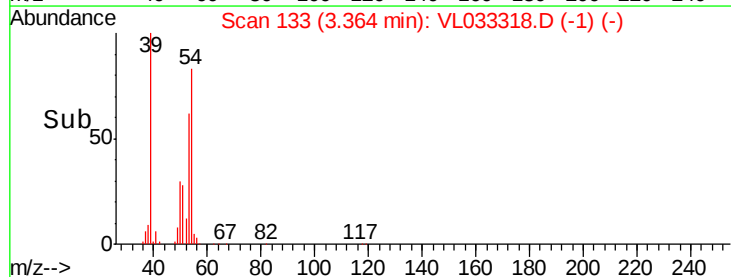
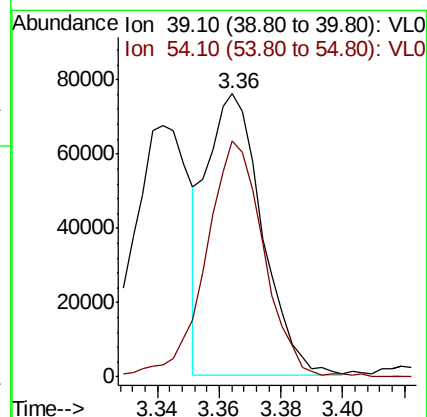
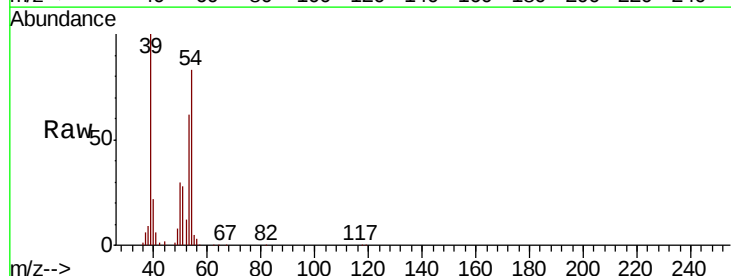
Acq: 15 Mar 2019 3:36

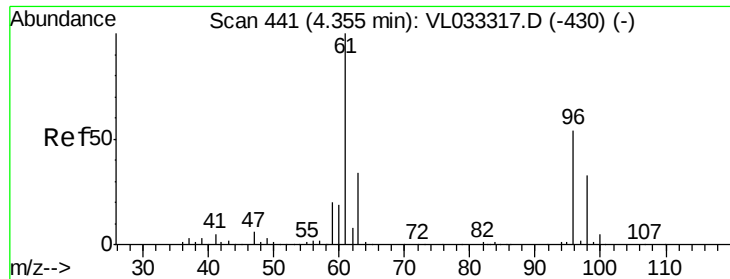
Tgt Ion: 39 Resp: 94258

Ion Ratio Lower Upper

39 100

54 88.3 74.4 111.6





#17

tert-Butyl alcohol

Concen: 0.919 ppbv

RT: 4.36 min Scan# 443

Delta R.T. 0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

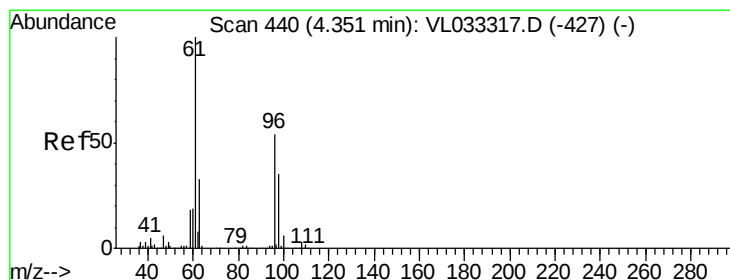
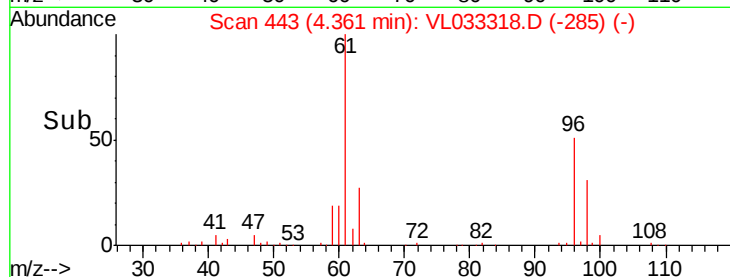
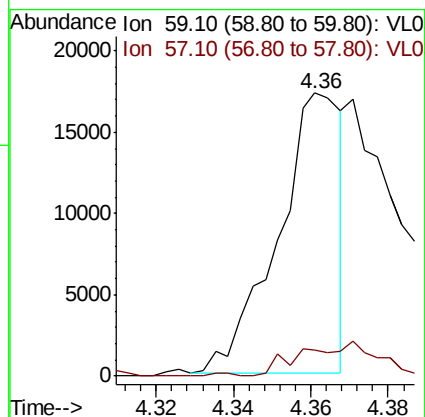
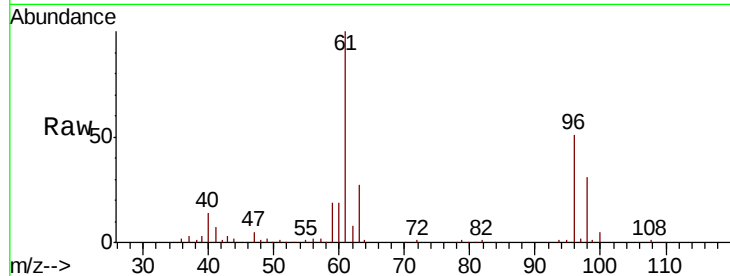
VSTDIC002

Tgt Ion: 59 Resp: 19702

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.8#



#18

1,1-Dichloroethene

Concen: 1.894 ppbv

RT: 4.35 min Scan# 440

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

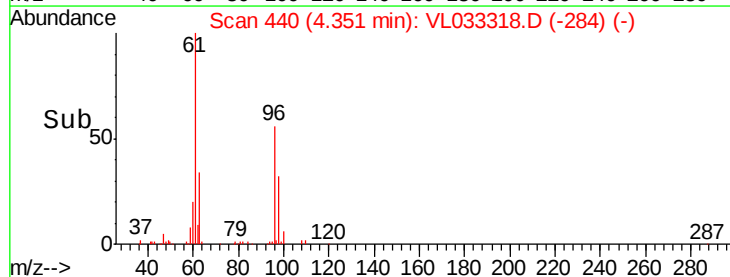
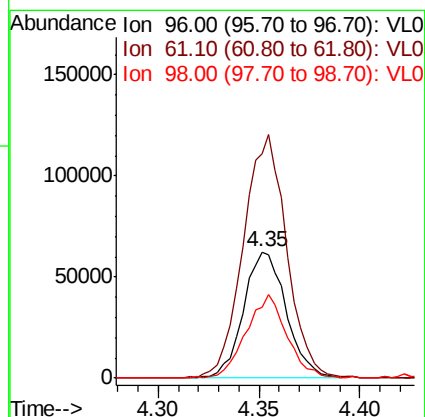
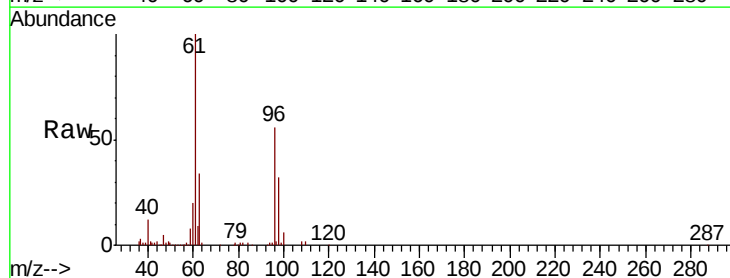
Tgt Ion: 96 Resp: 92676

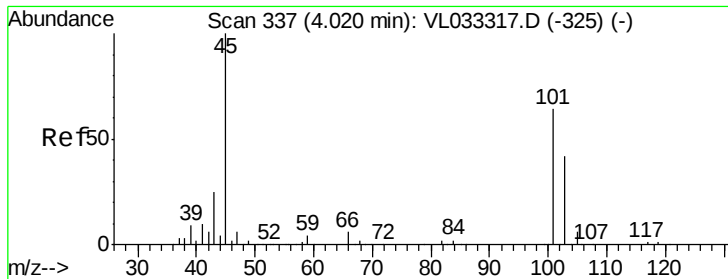
Ion Ratio Lower Upper

96 100

61 176.9 148.9 223.3

98 56.1 51.4 77.0





#19

Isopropyl Alcohol

Concen: 1.686 ppbv

RT: 4.03 min Scan# 340

Delta R.T. 0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

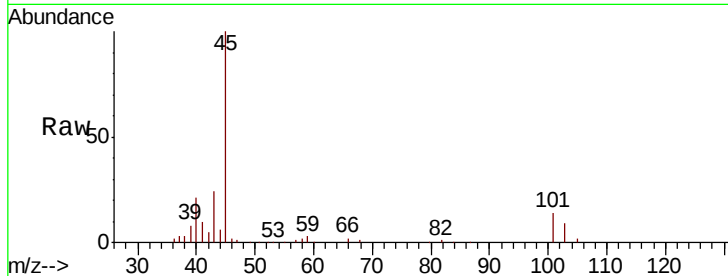
VSTDIC002

Tgt Ion: 45 Resp: 127605

Ion Ratio Lower Upper

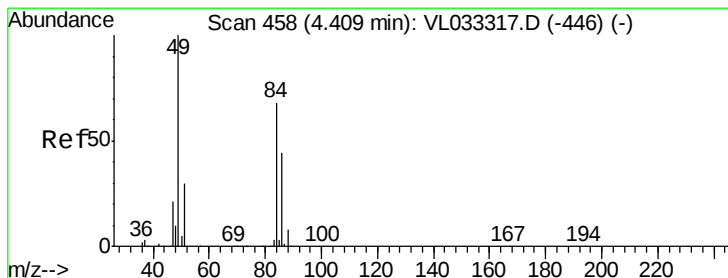
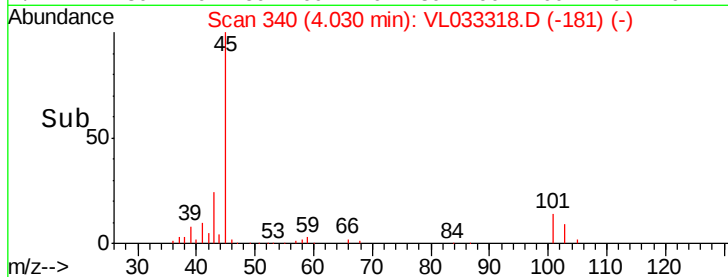
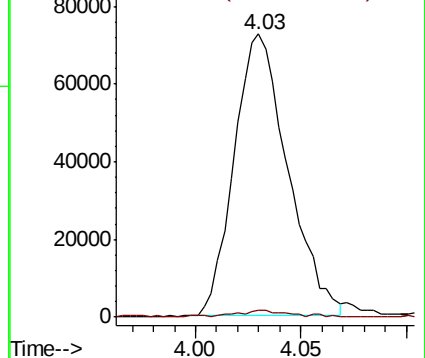
45 100

58 2.6 1.6 2.4#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 1.908 ppbv

RT: 4.41 min Scan# 457

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Tgt Ion: 84 Resp: 94465

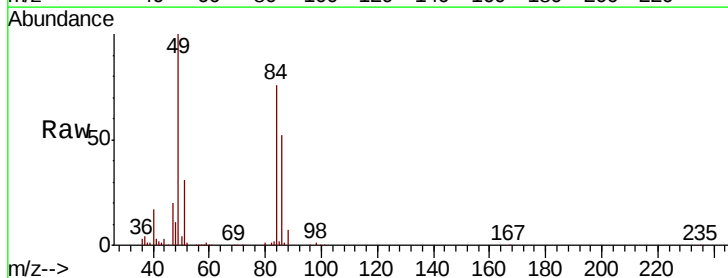
Ion Ratio Lower Upper

84 100

49 130.4 117.0 175.6

51 40.3 35.3 52.9

86 67.9 51.2 76.8

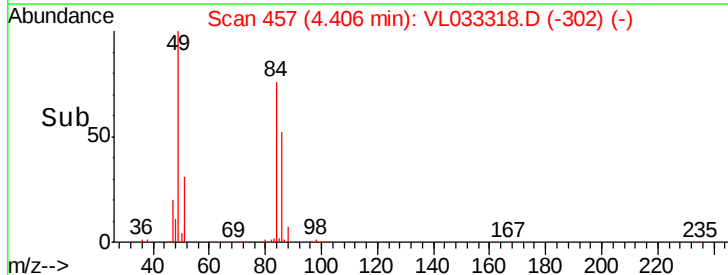
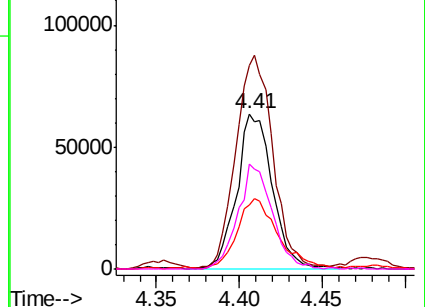


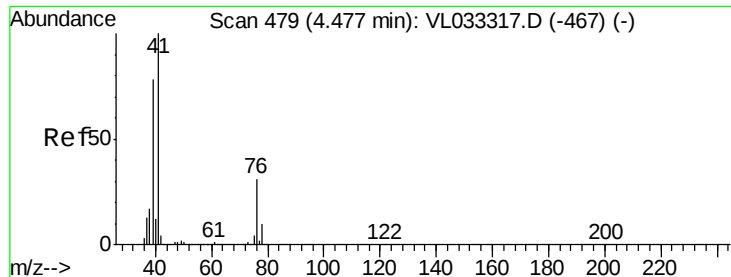
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





#21

Allyl Chloride

Concen: 1.896 ppbv

RT: 4.48 min Scan# 480

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

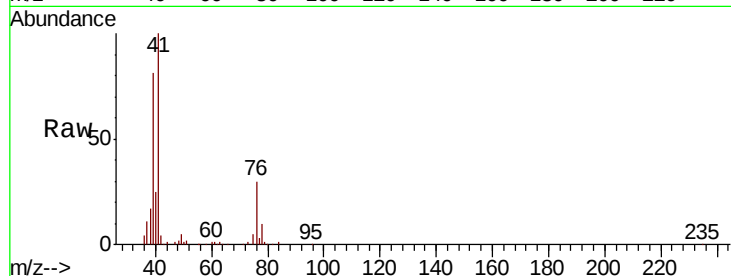
Tgt Ion: 41 Resp: 139540

Ion Ratio Lower Upper

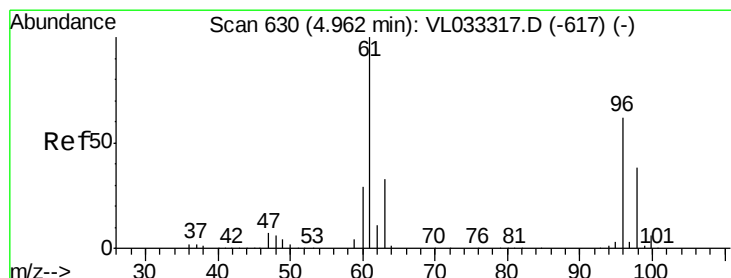
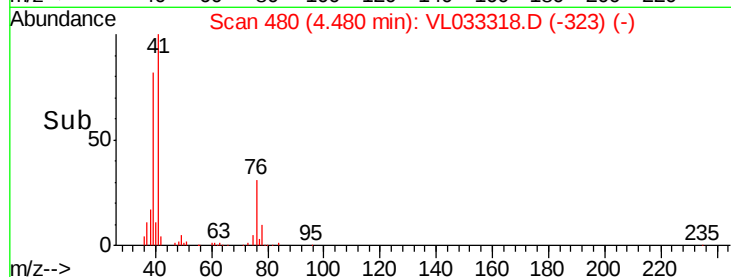
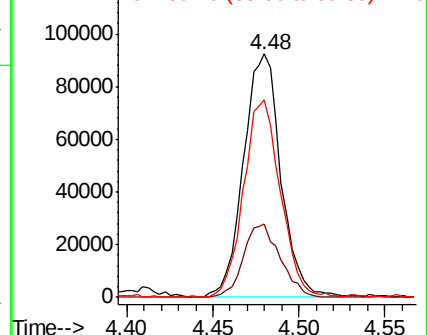
41 100

76 29.7 24.1 36.1

39 81.0 65.0 97.4



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: 1.791 ppbv

RT: 4.97 min Scan# 631

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

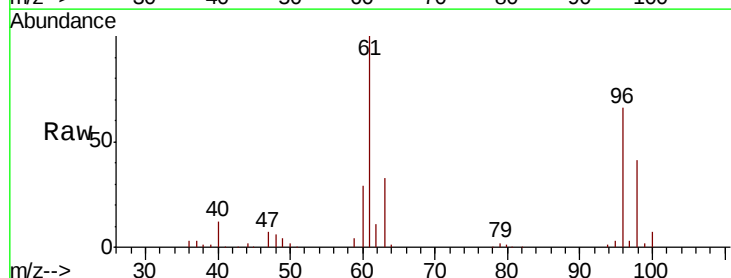
Tgt Ion: 96 Resp: 88166

Ion Ratio Lower Upper

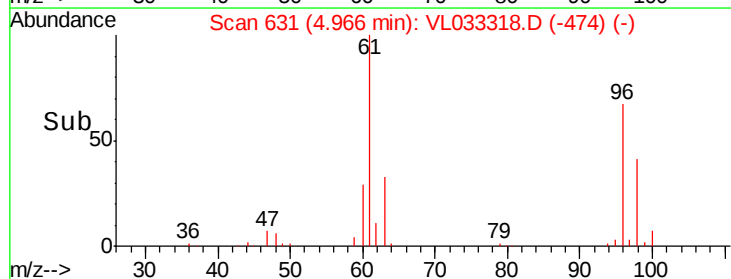
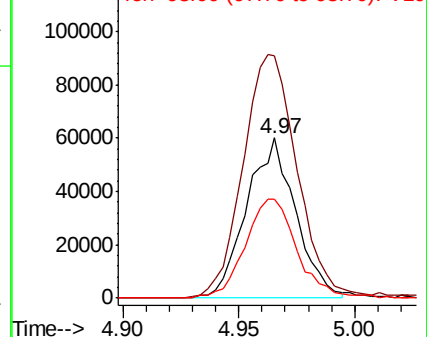
96 100

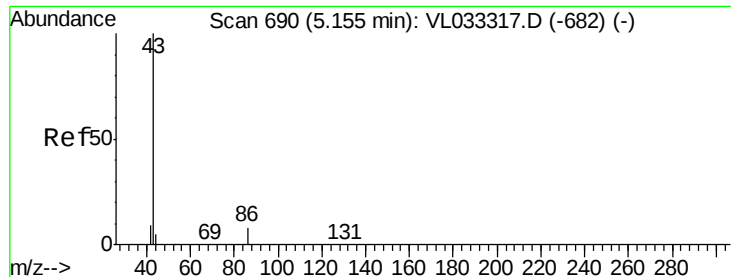
61 150.0 129.8 194.8

98 61.6 49.2 73.8



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: 1.905 ppbv

RT: 5.16 min Scan# 690

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

Tgt Ion: 43 Resp: 332394

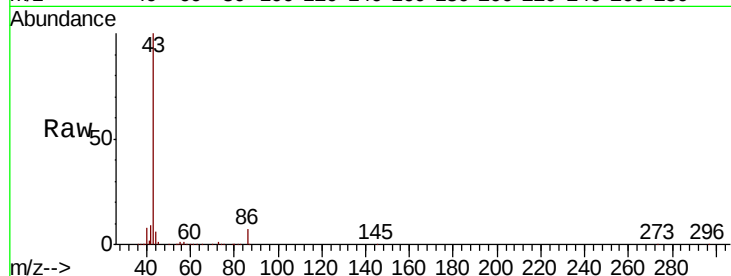
Ion Ratio Lower Upper

43 100

86 6.9 5.6 8.4

42 8.5 7.8 11.6

44 5.0 4.2 6.4

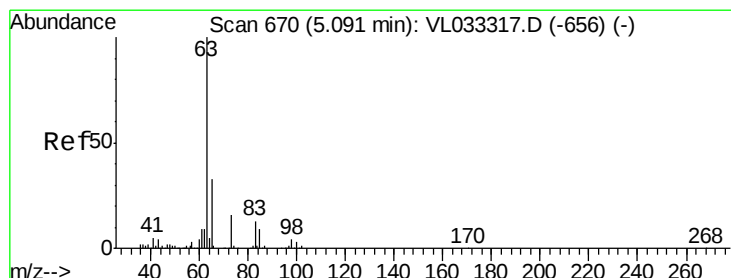
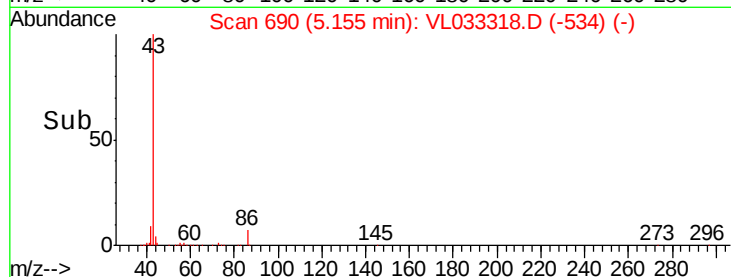
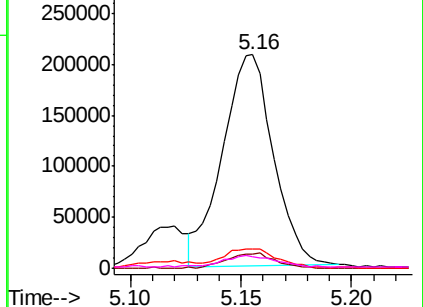


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#24

1,1-Dichloroethane

Concen: 1.858 ppbv

RT: 5.09 min Scan# 670

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

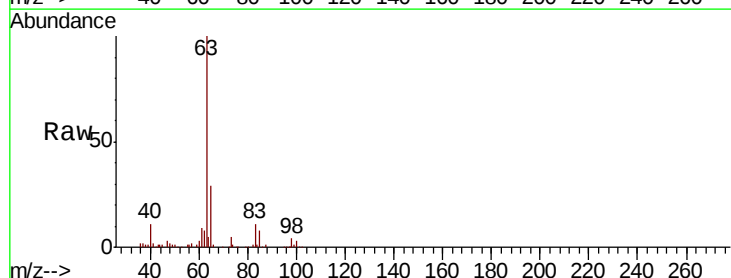
Tgt Ion: 63 Resp: 234239

Ion Ratio Lower Upper

63 100

98 4.3 2.1 6.2

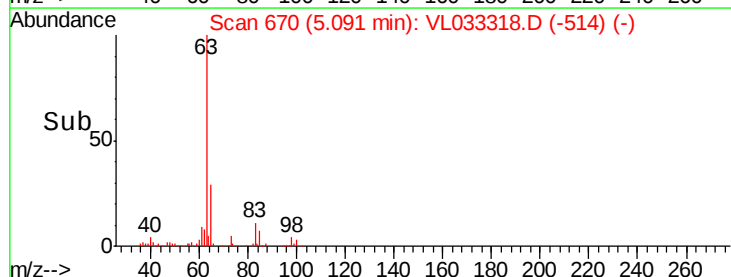
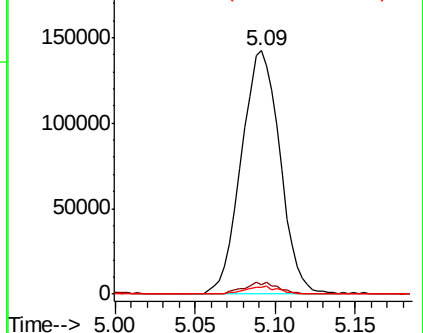
100 2.8 1.3 3.9

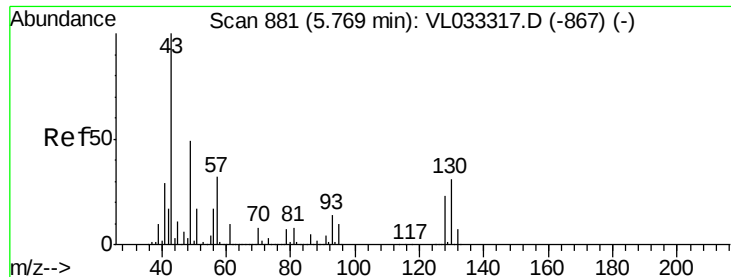


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 98.00 (97.70 to 98.70): VL0

Ion 100.00 (99.70 to 100.70): VL0

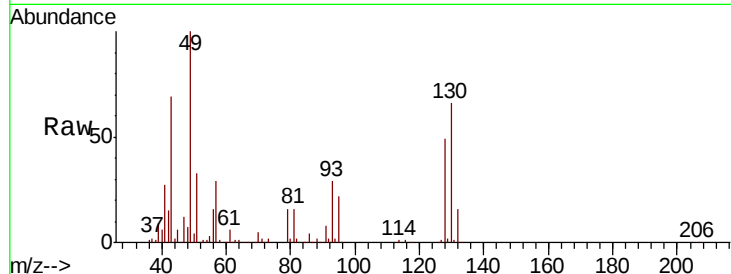




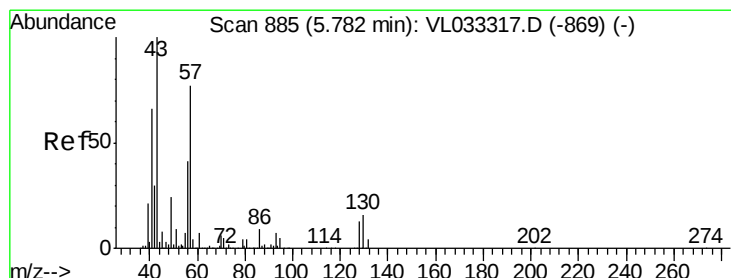
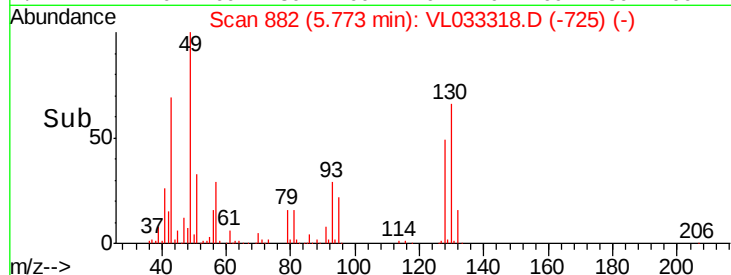
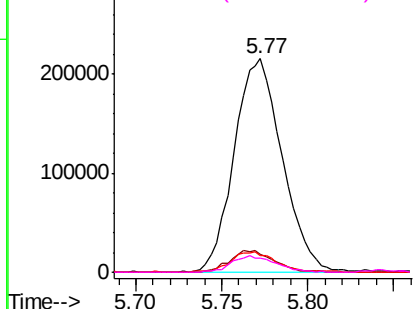
#25  
Ethyl Acetate  
Concen: 1.870 ppbv  
RT: 5.77 min Scan# 882  
Delta R.T. 0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 415463 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 45       | 9.7   | 7.8   | 11.8   |
| 61       | 9.1   | 7.1   | 10.7   |
| 70       | 7.1   | 5.7   | 8.5    |

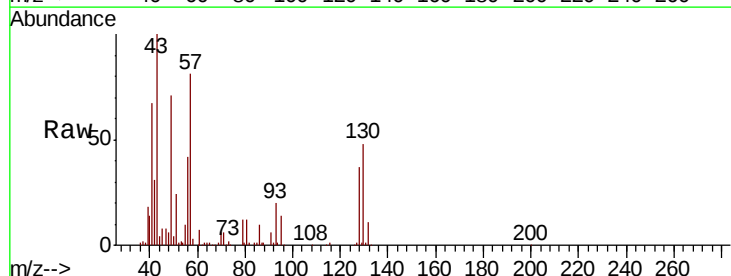


Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 45.10 (44.80 to 45.80): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 70.10 (69.80 to 70.80): VL0

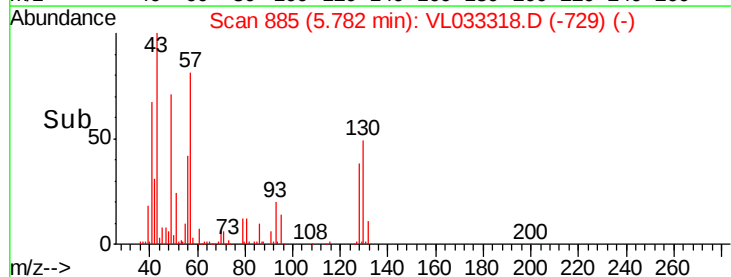
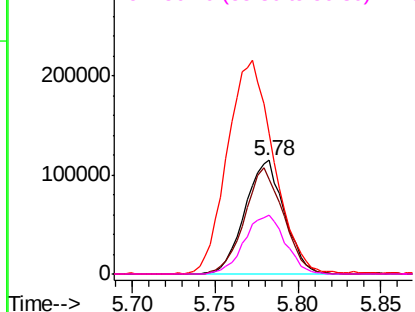


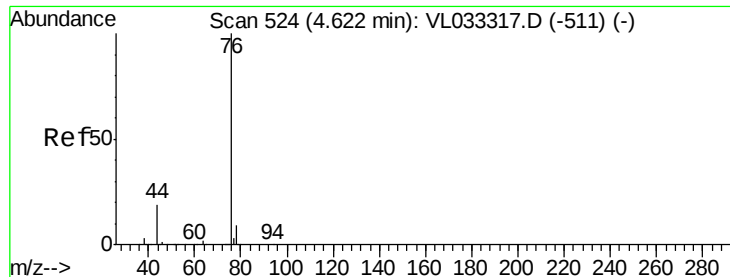
#26  
Hexane  
Concen: 1.820 ppbv  
RT: 5.78 min Scan# 885  
Delta R.T. 0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 189026 |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 92.2  | 71.8  | 107.6  |
| 43       | 222.7 | 182.1 | 273.1  |
| 56       | 53.7  | 42.2  | 63.2   |



Abundance Ion 57.10 (56.80 to 57.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0  
Ion 43.10 (42.80 to 43.80): VL0  
Ion 56.10 (55.80 to 56.80): VL0





#27

Carbon Disulfide

Concen: 1.856 ppbv

RT: 4.62 min Scan# 525

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

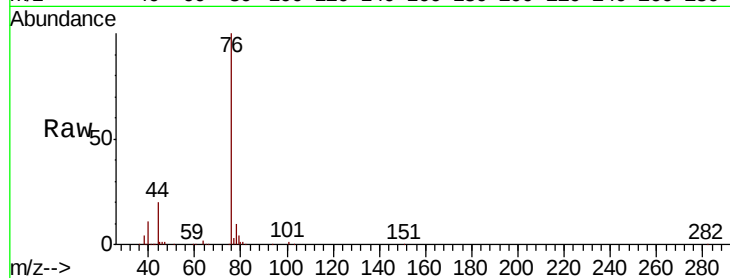
Tgt Ion: 76 Resp: 204913

Ion Ratio Lower Upper

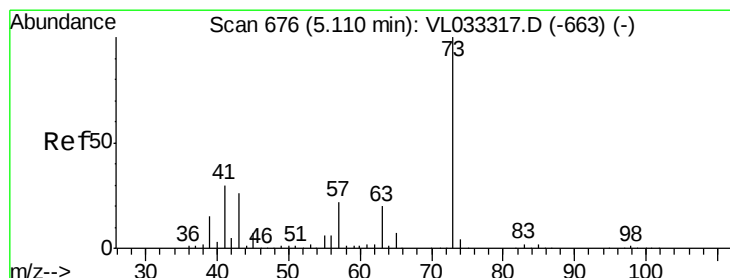
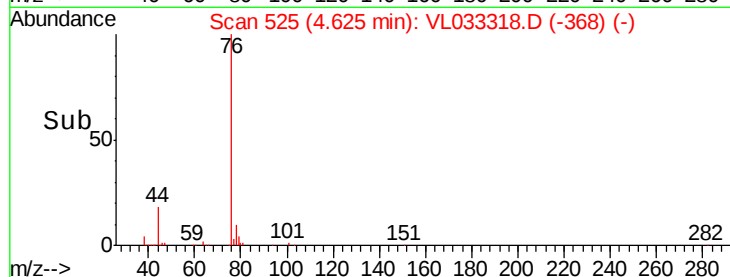
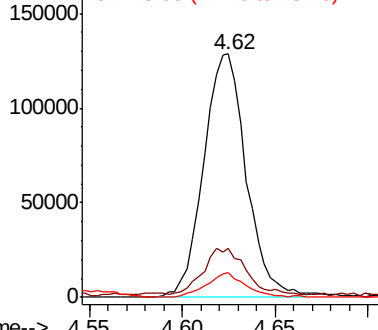
76 100

44 21.2 15.0 22.6

78 9.4 7.4 11.2



Abundance Ion 76.00 (75.70 to 76.70): VL0  
Ion 44.10 (43.80 to 44.80): VL0  
Ion 78.00 (77.70 to 78.70): VL0



#28

Methyl tert-Butyl Ether

Concen: 1.885 ppbv

RT: 5.12 min Scan# 678

Delta R.T. 0.01 min

Lab File: VL033318.D

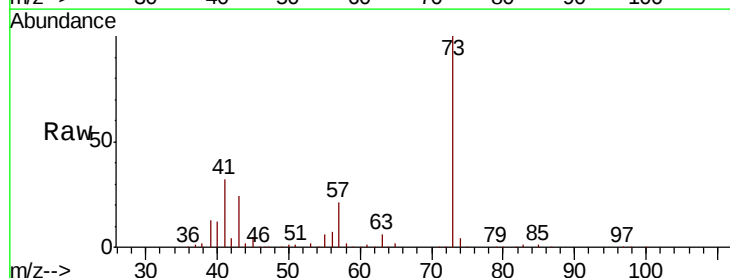
Acq: 15 Mar 2019 3:36

Tgt Ion: 73 Resp: 274903

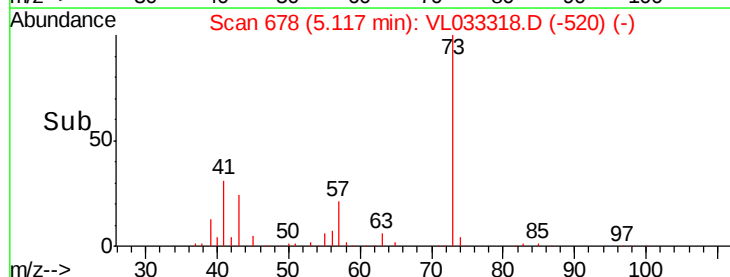
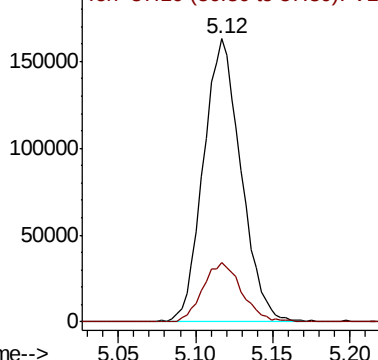
Ion Ratio Lower Upper

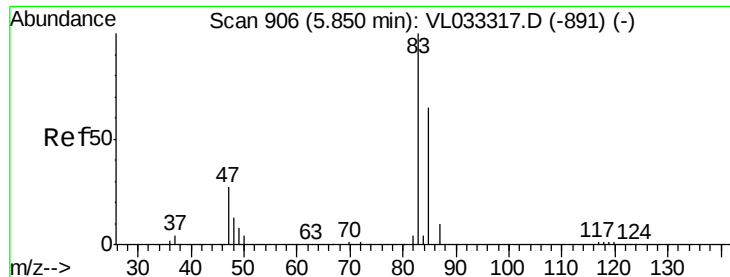
73 100

57 21.9 17.8 26.6



Abundance Ion 73.10 (72.80 to 73.80): VL0  
Ion 57.10 (56.80 to 57.80): VL0

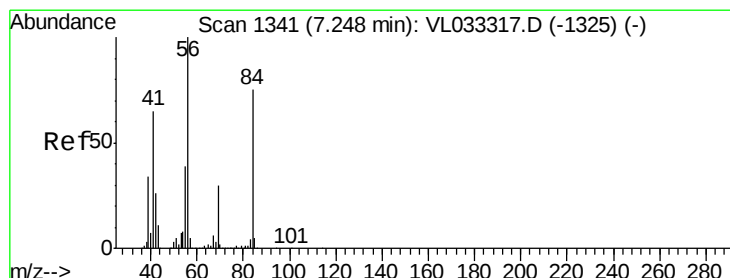
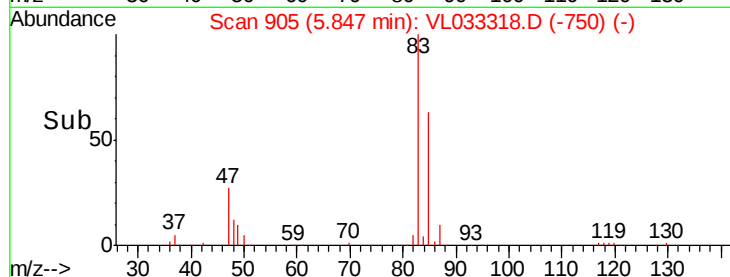
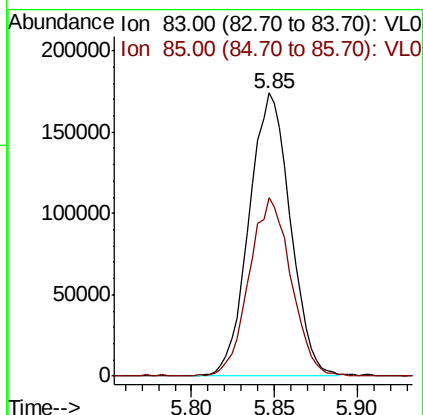
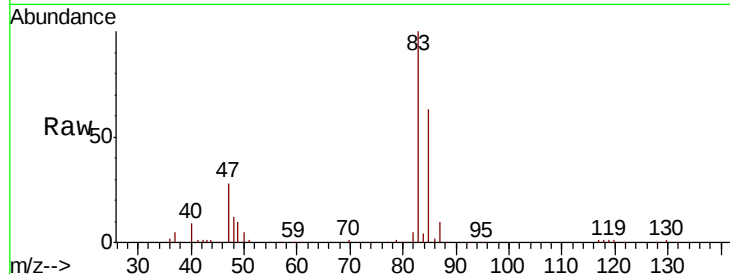




#29  
Chloroform  
Concen: 1.858 ppbv  
RT: 5.85 min Scan# 905  
Delta R.T. -0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

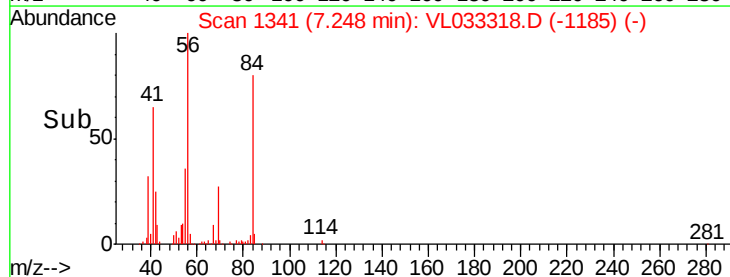
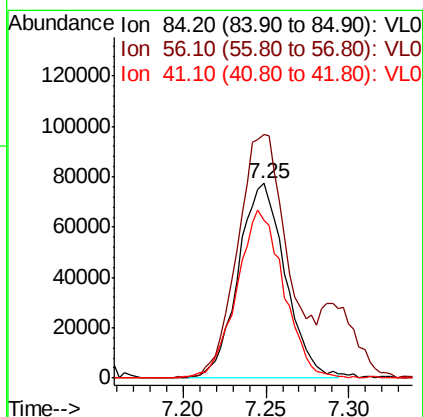
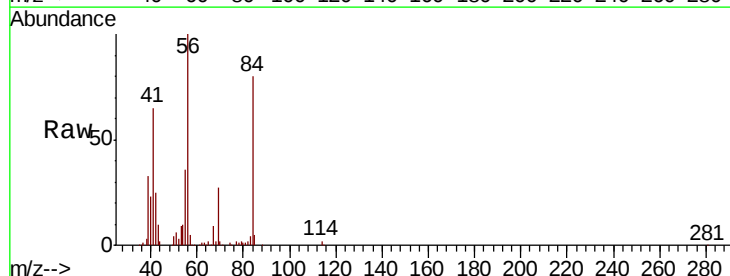
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

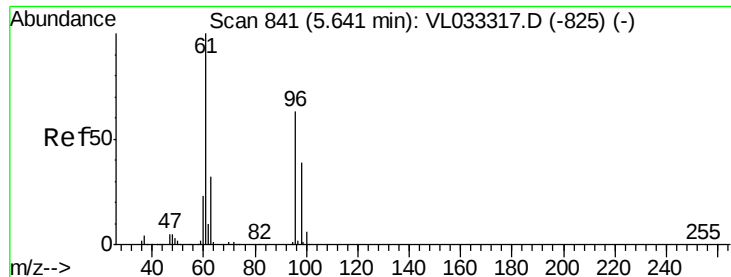
Tgt Ion: 83 Resp: 301184  
Ion Ratio Lower Upper  
83 100  
85 63.1 51.8 77.8



#30  
Cyclohexane  
Concen: 1.908 ppbv  
RT: 7.25 min Scan# 1341  
Delta R.T. 0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Tgt Ion: 84 Resp: 152692  
Ion Ratio Lower Upper  
84 100  
56 163.0 111.0 166.6  
41 86.3 69.1 103.7



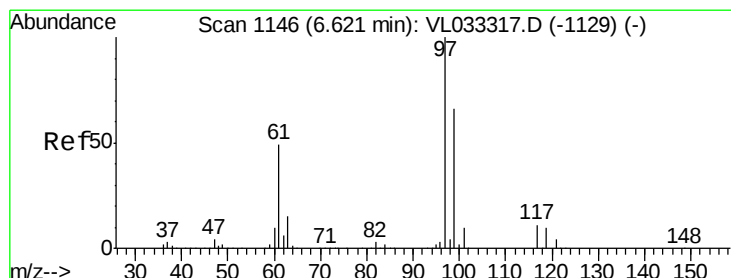
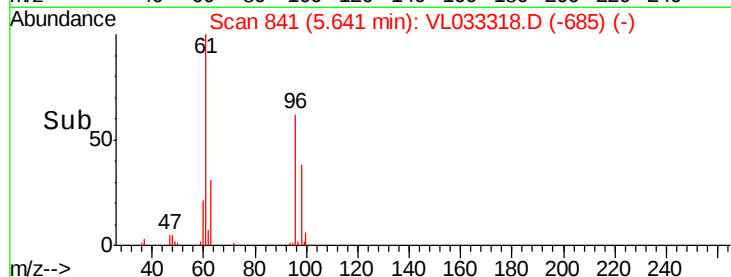
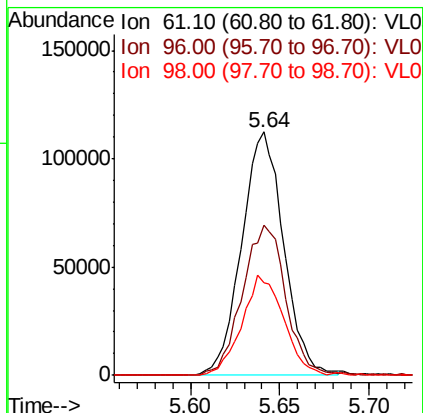
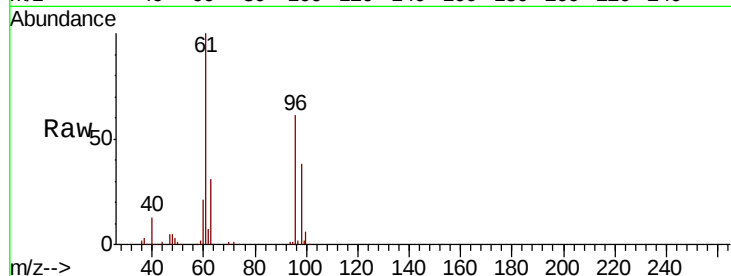


#31

cis-1,2-Dichloroethene  
Concen: 1.856 ppbv  
RT: 5.64 min Scan# 841  
Delta R.T. 0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

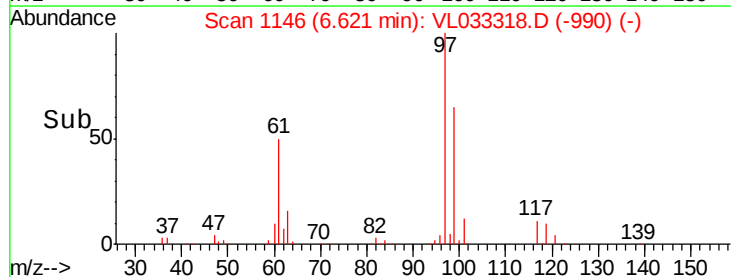
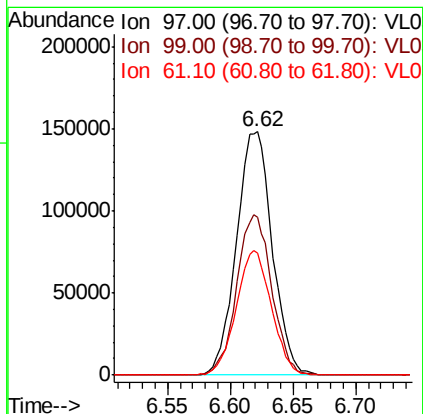
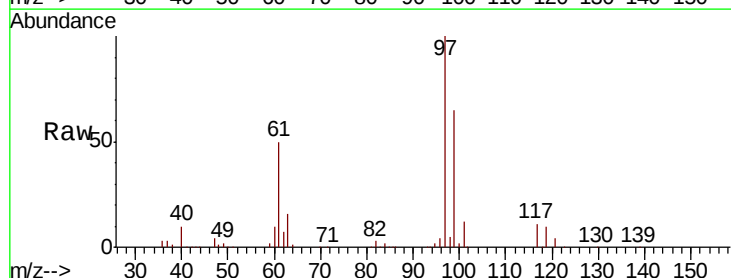
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 61.4  | 50.5  | 75.7  |
| 98      | 37.8  | 31.1  | 46.7  |

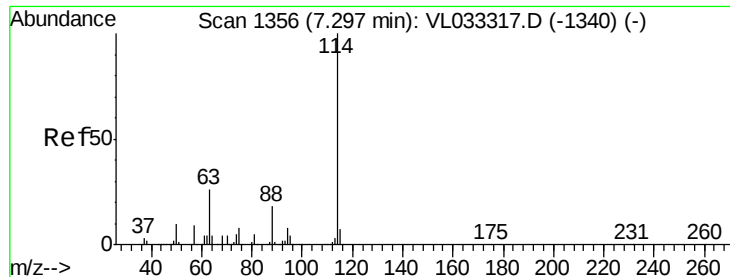


#32

1,1,1-Trichloroethane  
Concen: 1.859 ppbv  
RT: 6.62 min Scan# 1146  
Delta R.T. 0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 97      | 100   |       |       |
| 99      | 64.7  | 51.8  | 77.8  |
| 61      | 50.5  | 39.6  | 59.4  |

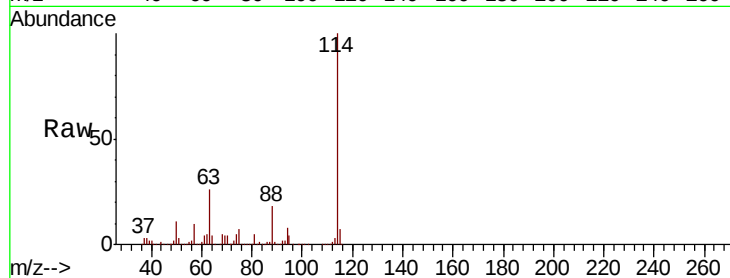




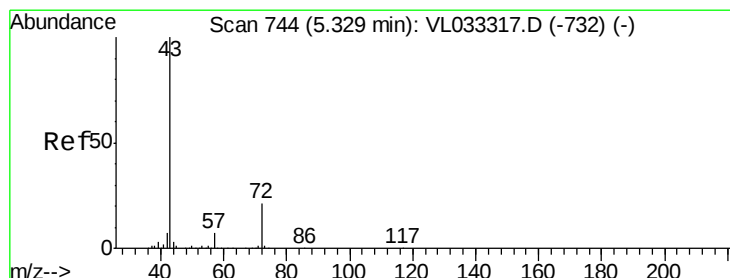
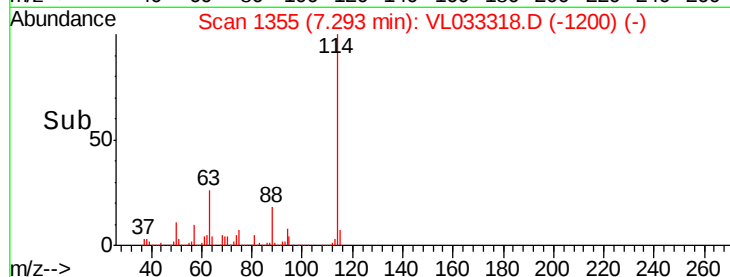
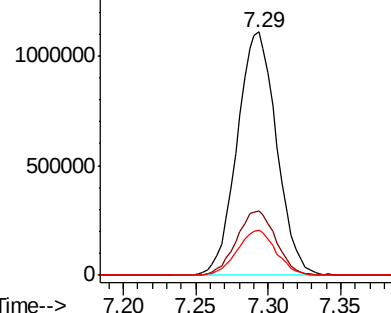
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.29 min Scan# 1355  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

Tgt Ion: 114 Resp: 2096670  
 Ion Ratio Lower Upper  
 114 100  
 63 26.6 21.5 32.3  
 88 18.2 14.6 22.0

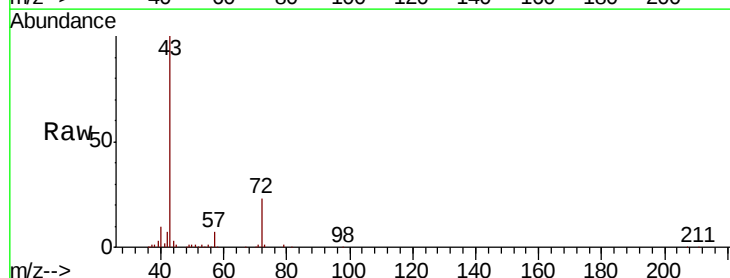


Abundance Ion 114.10 (113.80 to 114.80): VL0  
 1500000 Ion 63.10 (62.80 to 63.80): VL0  
 Ion 88.10 (87.80 to 88.80): VL0

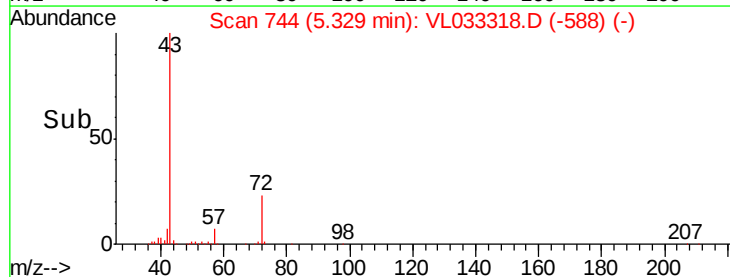
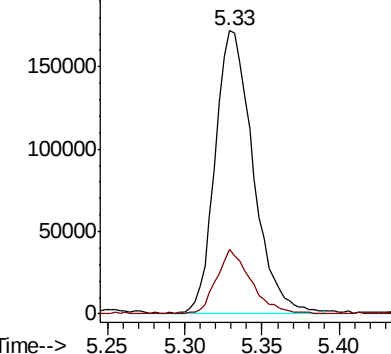


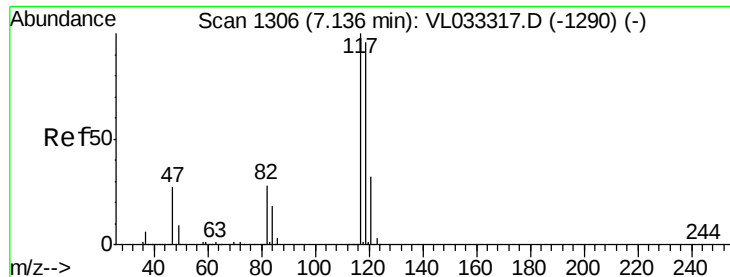
#34  
 2-Butanone  
 Concen: 2.053 ppbv  
 RT: 5.33 min Scan# 744  
 Delta R.T. 0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion: 43 Resp: 289922  
 Ion Ratio Lower Upper  
 43 100  
 72 21.4 17.1 25.7



Abundance Ion 43.10 (42.80 to 43.80): VL0  
 200000 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 1.917 ppbv

RT: 7.13 min Scan# 1305

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

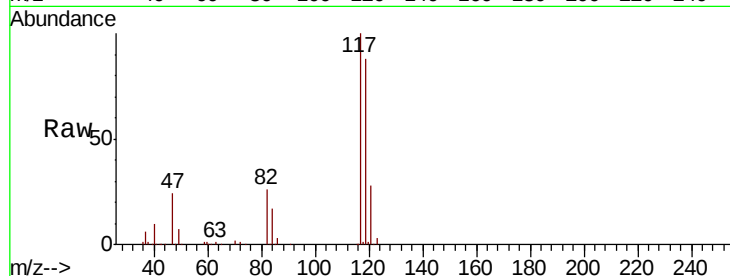
Tgt Ion: 117 Resp: 307871

Ion Ratio Lower Upper

117 100

119 87.5 76.8 115.2

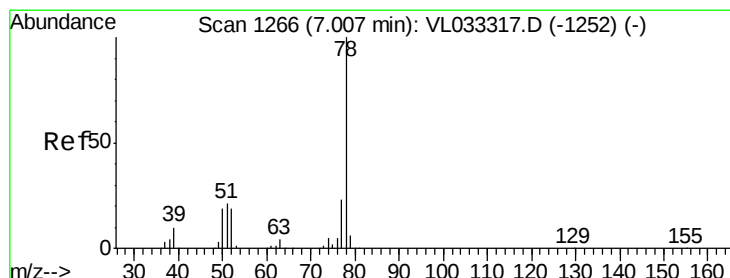
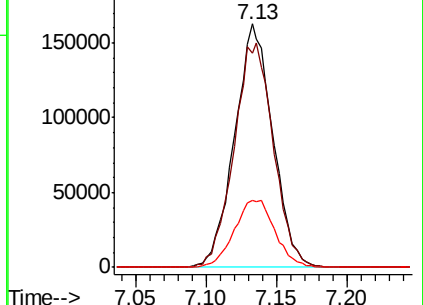
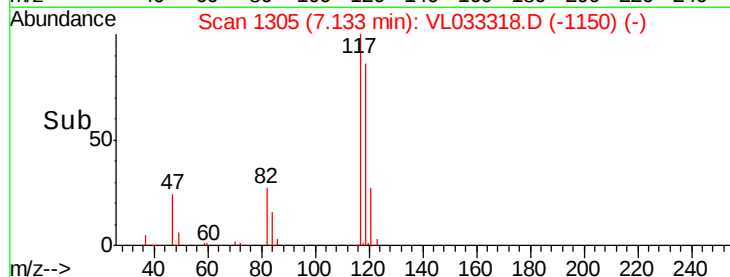
121 27.7 25.2 37.8



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: 1.891 ppbv

RT: 7.00 min Scan# 1265

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

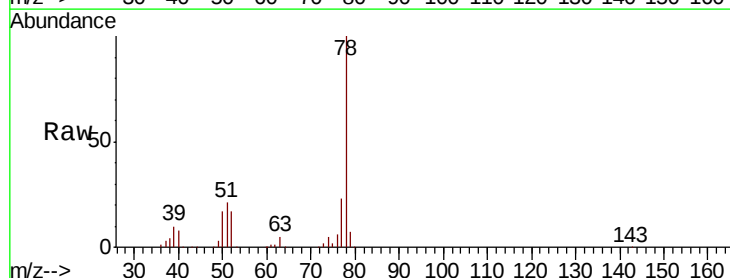
Tgt Ion: 78 Resp: 383828

Ion Ratio Lower Upper

78 100

77 23.2 18.0 27.0

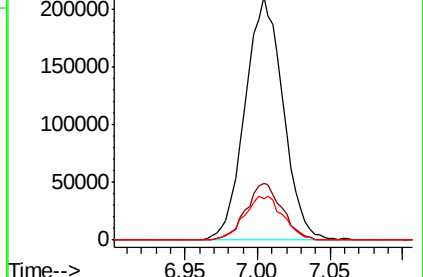
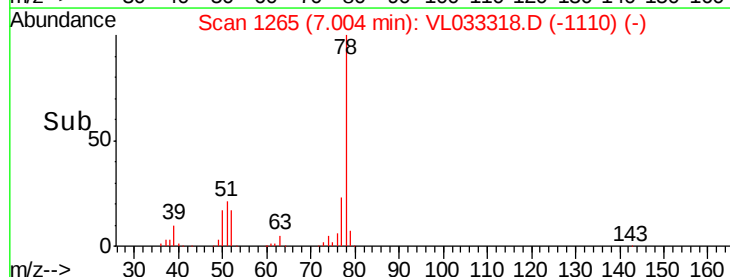
50 17.2 15.0 22.4

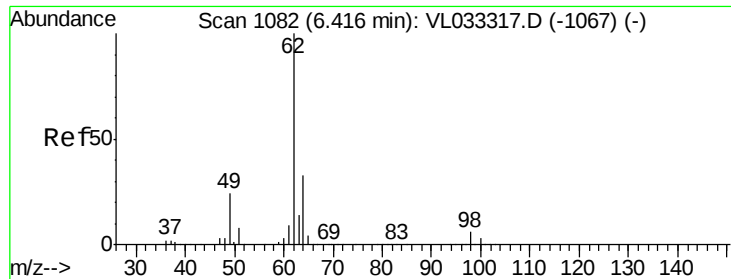


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

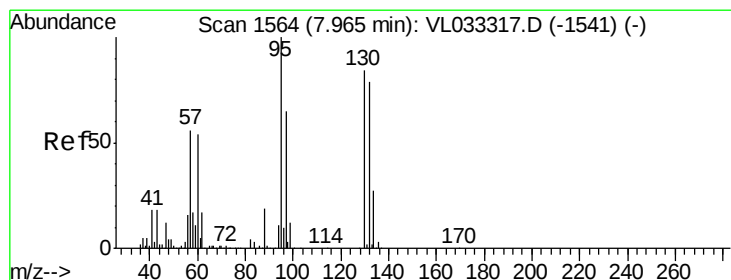
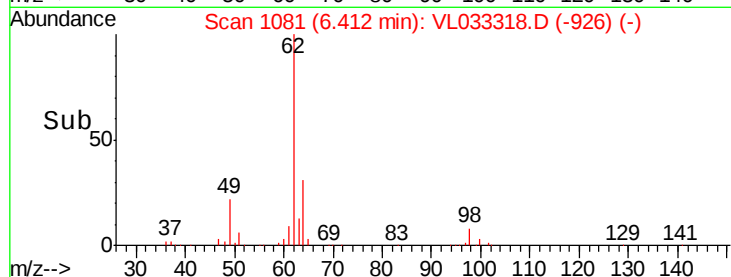
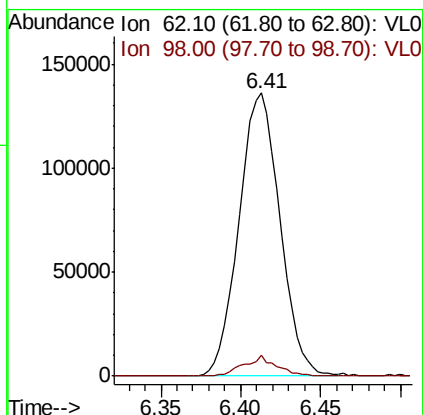
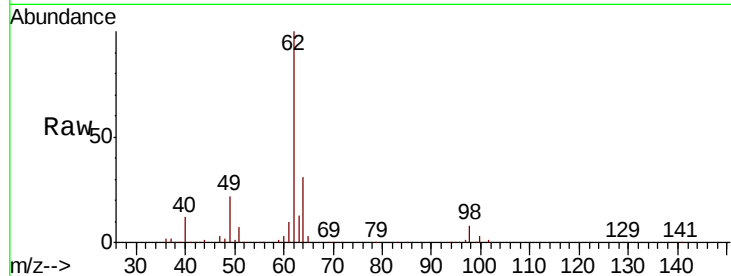




#37  
 1,2-Dichloroethane  
 Concen: 1.938 ppbv  
 RT: 6.41 min Scan# 1081  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

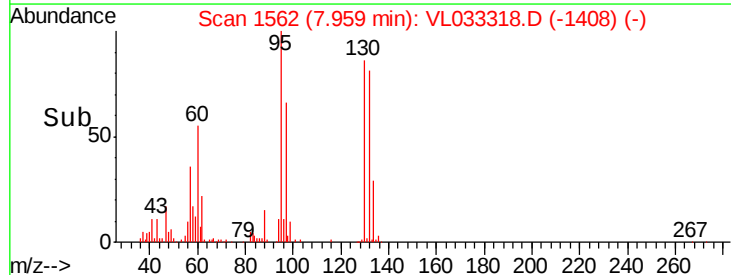
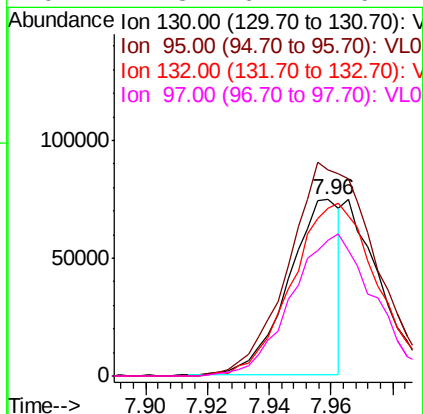
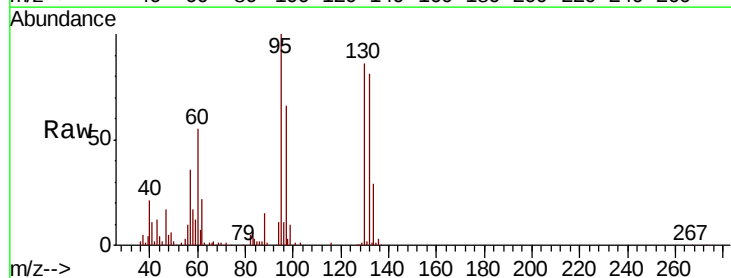
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

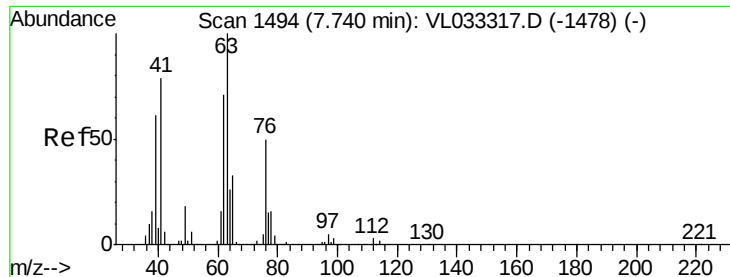
Tgt Ion: 62 Resp: 237863  
 Ion Ratio Lower Upper  
 62 100  
 98 5.9 4.6 6.8



#38  
 Trichloroethene  
 Concen: 1.050 ppbv  
 RT: 7.96 min Scan# 1562  
 Delta R.T. -0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion: 130 Resp: 85061  
 Ion Ratio Lower Upper  
 130 100  
 95 117.8 94.9 142.3  
 132 95.5 75.4 113.0  
 97 77.3 61.4 92.2

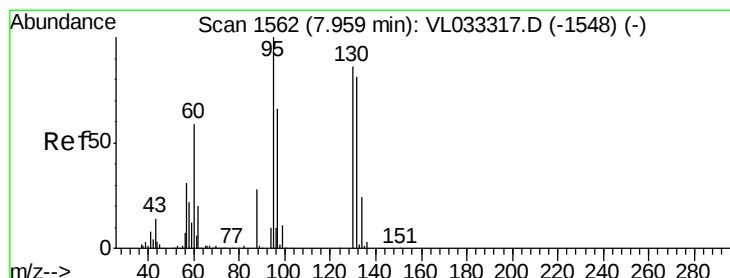
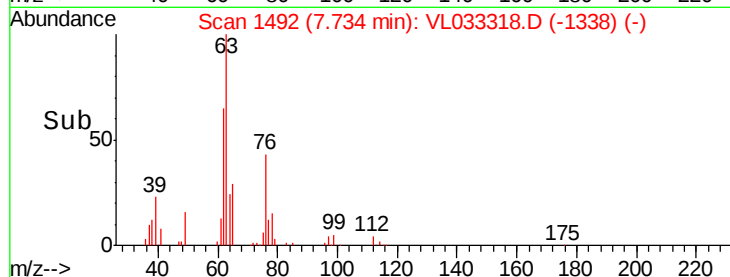
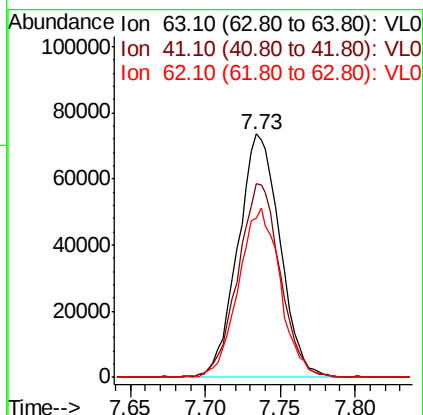
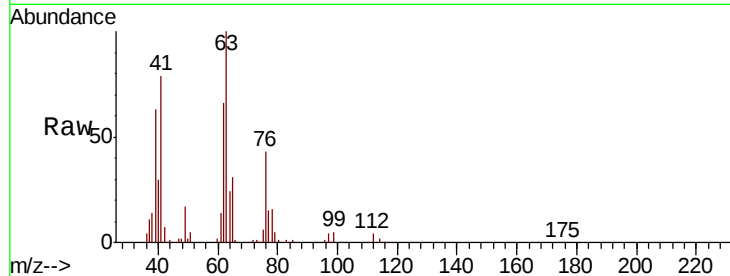




#39  
 1,2-Dichloropropane  
 Concen: 1.842 ppbv  
 RT: 7.73 min Scan# 1492  
 Delta R.T. -0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

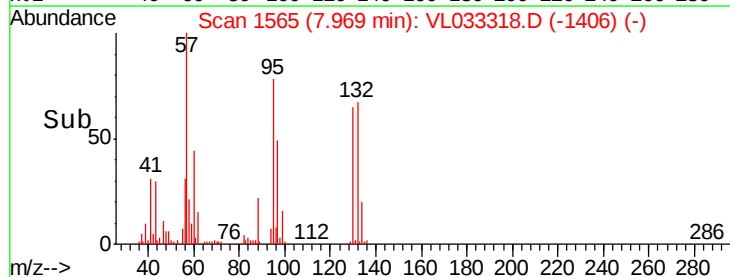
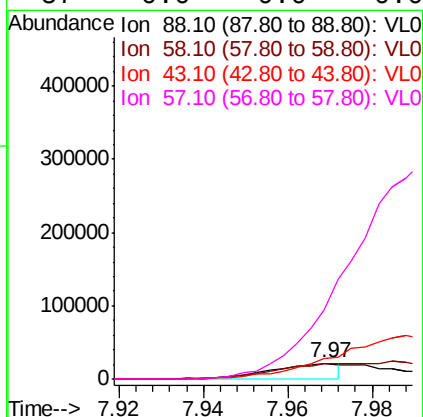
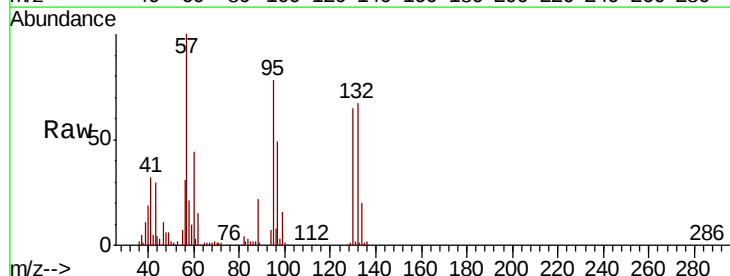
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

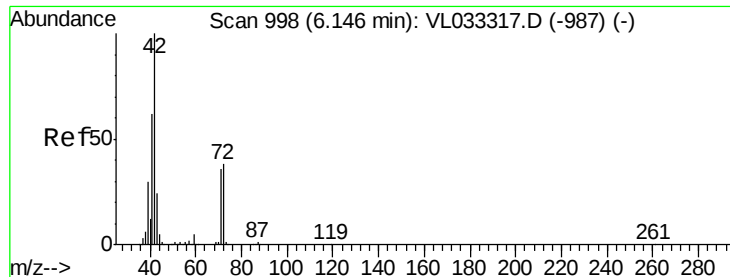
Tgt Ion: 63 Resp: 143657  
 Ion Ratio Lower Upper  
 63 100  
 41 79.0 63.5 95.3  
 62 65.4 56.5 84.7



#40  
 1,4-Dioxane  
 Concen: 0.862 ppbv  
 RT: 7.97 min Scan# 1565  
 Delta R.T. 0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion: 88 Resp: 24122  
 Ion Ratio Lower Upper  
 88 100  
 58 0.0 108.7 163.1#  
 43 0.0 0.0 0.0  
 57 0.0 0.0 0.0

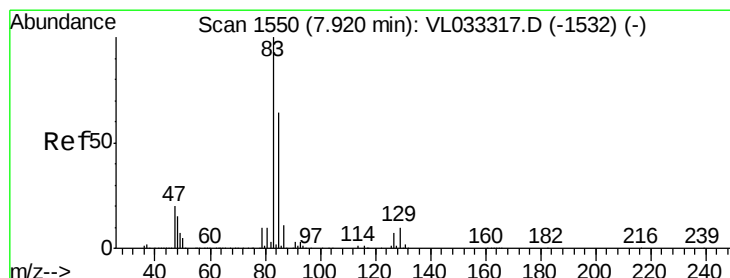
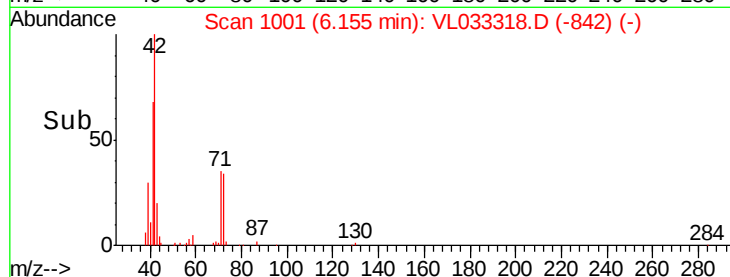
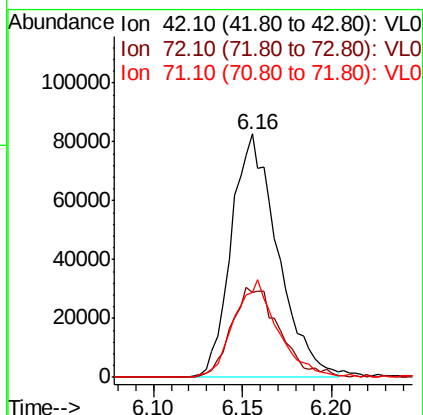
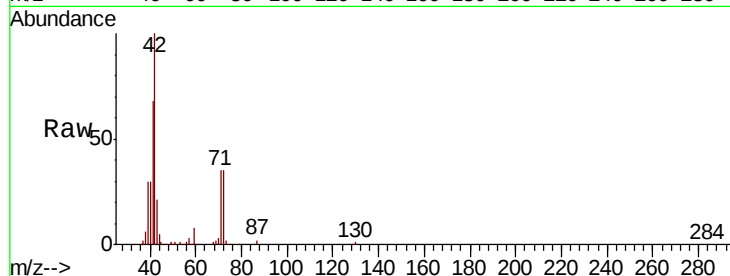




#41  
Tetrahydrofuran  
Concen: 1.883 ppbv  
RT: 6.16 min Scan# 1001  
Delta R.T. 0.01 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

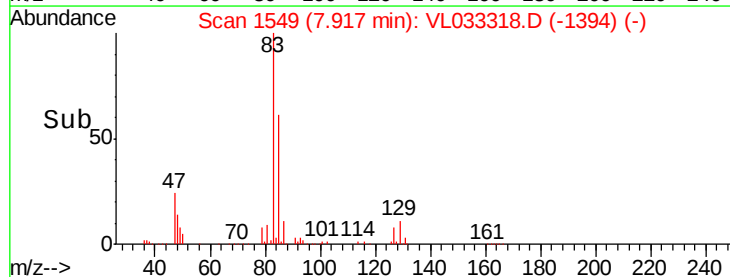
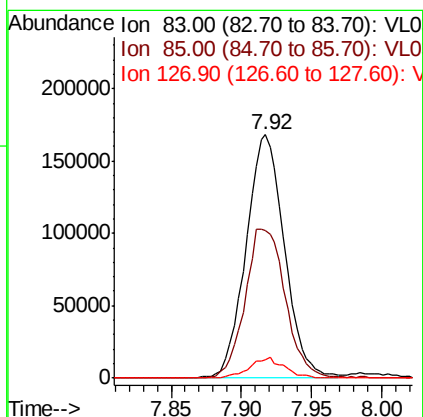
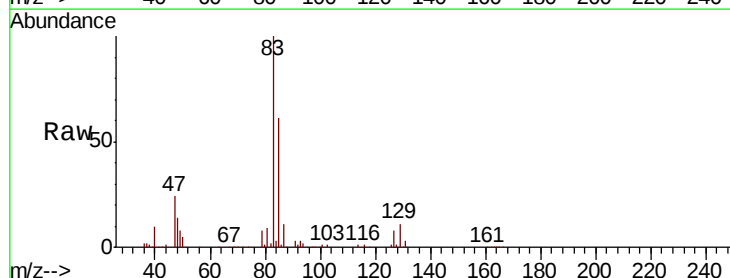
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

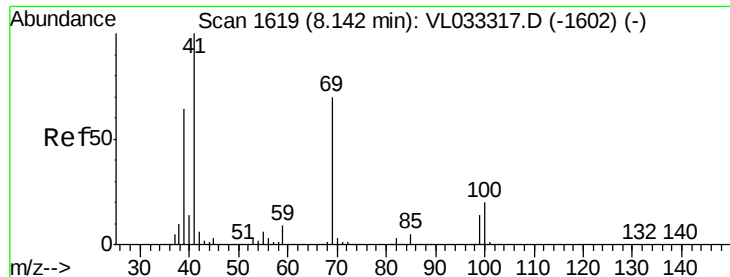
Tgt Ion: 42 Resp: 149971  
Ion Ratio Lower Upper  
42 100  
72 39.0 31.2 46.8  
71 38.3 29.9 44.9



#42  
Bromodichloromethane  
Concen: 1.866 ppbv  
RT: 7.92 min Scan# 1549  
Delta R.T. -0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Tgt Ion: 83 Resp: 320925  
Ion Ratio Lower Upper  
83 100  
85 60.8 51.1 76.7  
127 7.7 6.0 9.0





#43

Methyl Methacrylate

Concen: 1.829 ppbv

RT: 8.14 min Scan# 1617

Delta R.T. -0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

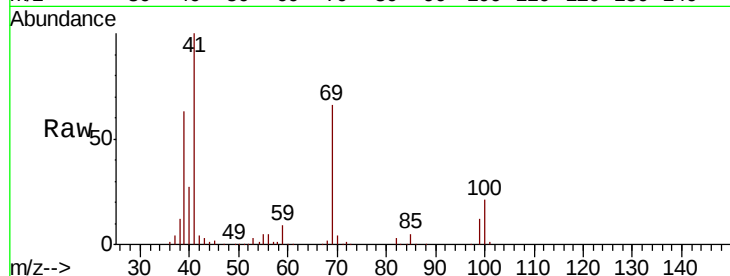
Tgt Ion: 69 Resp: 147987

Ion Ratio Lower Upper

69 100

41 152.9 119.0 178.4

100 31.4 24.3 36.5

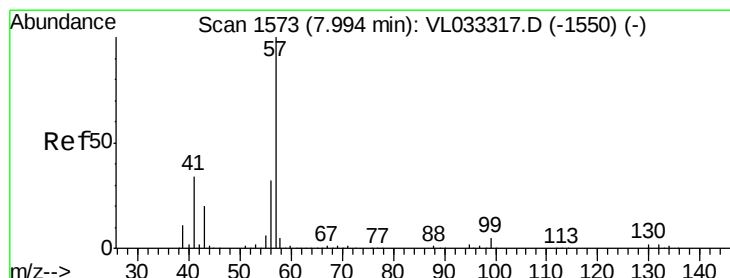
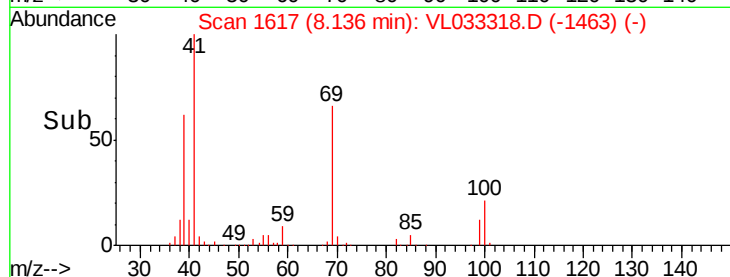
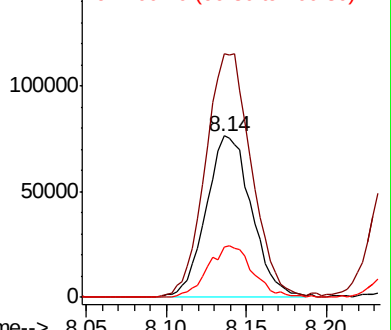


Abundance

Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 1.876 ppbv

RT: 7.99 min Scan# 1572

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

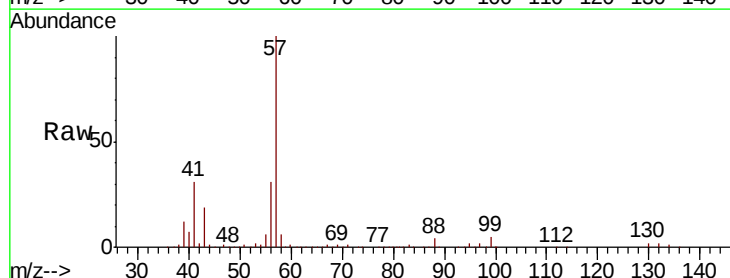
Tgt Ion: 57 Resp: 653148

Ion Ratio Lower Upper

57 100

41 32.4 26.1 39.1

56 31.1 24.7 37.1

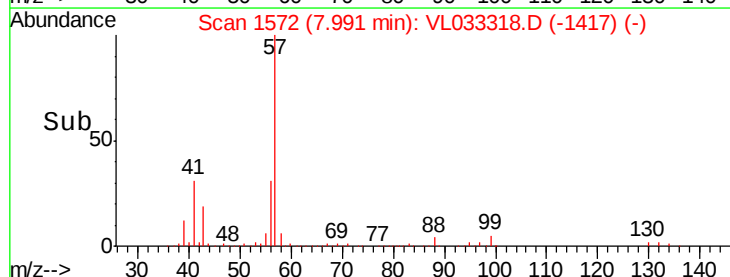
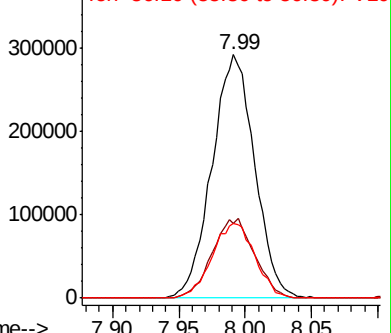


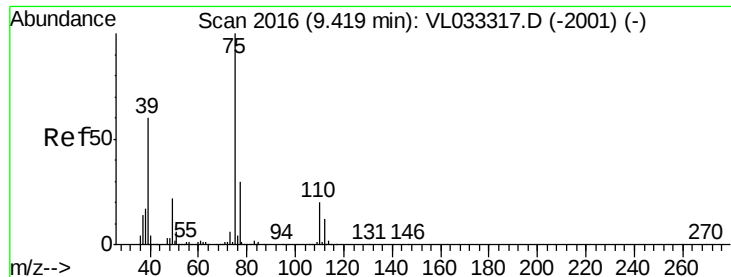
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#45

t-1,3-Dichloropropene

Concen: 1.866 ppbv

RT: 9.42 min Scan# 2015

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

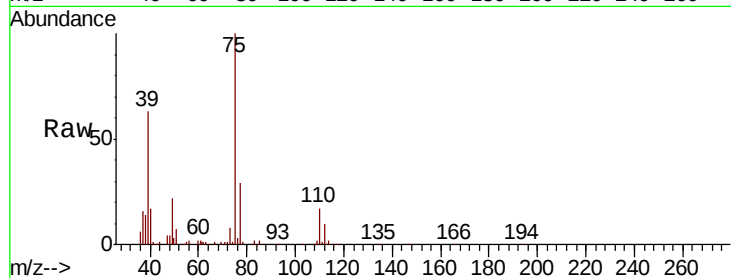
VSTDIC002

Tgt Ion: 75 Resp: 177139

Ion Ratio Lower Upper

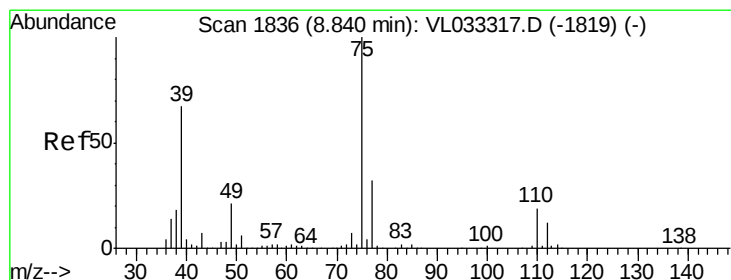
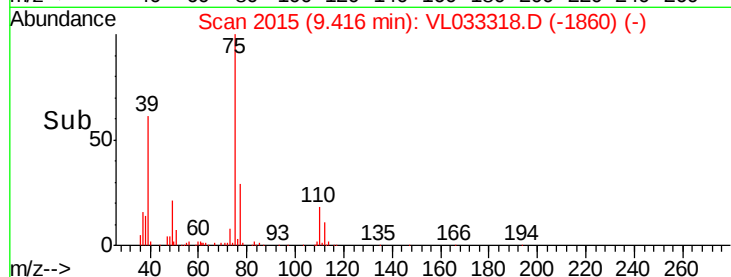
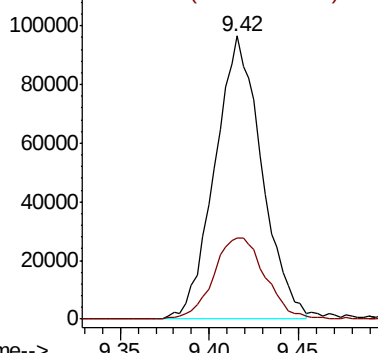
75 100

77 28.6 24.2 36.4



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: 1.839 ppbv

RT: 8.84 min Scan# 1835

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

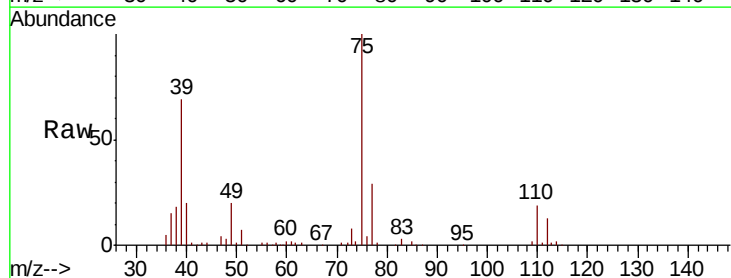
Tgt Ion: 75 Resp: 210236

Ion Ratio Lower Upper

75 100

39 68.4 53.7 80.5

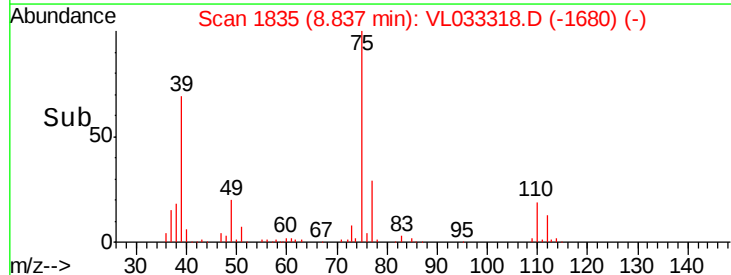
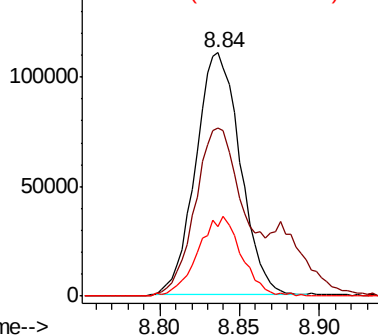
77 28.6 25.5 38.3

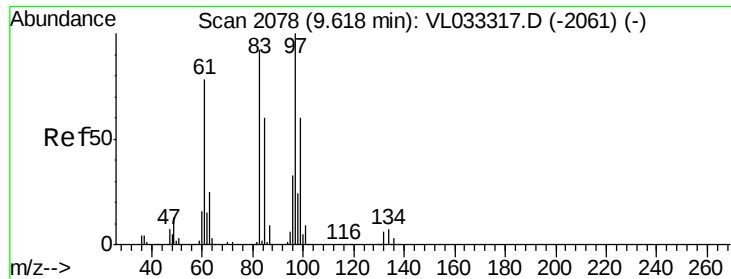


Abundance Ion 75.00 (74.70 to 75.70): VL0

Ion 39.00 (38.70 to 39.70): VL0

Ion 77.00 (76.70 to 77.70): VL0

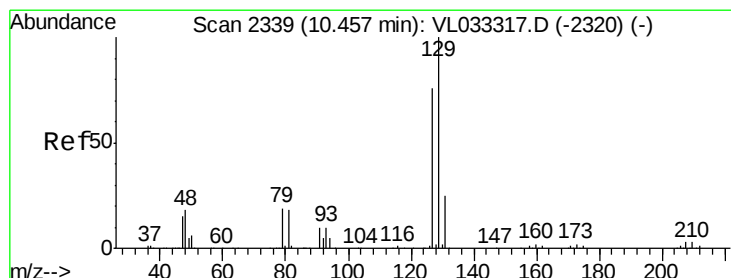
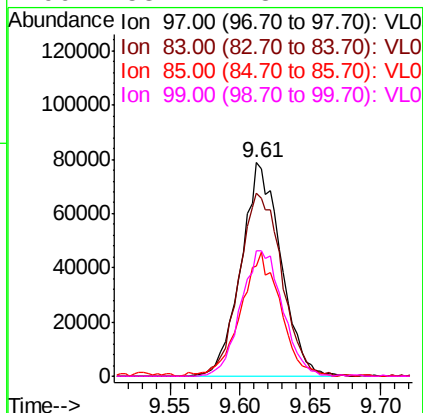
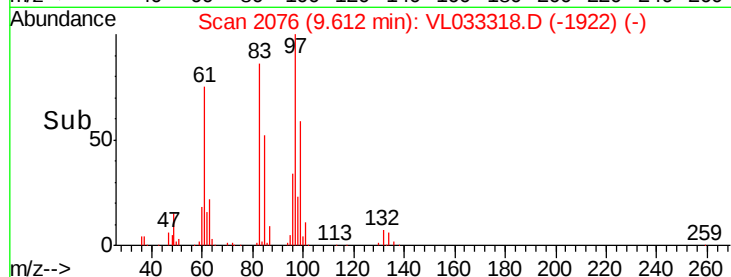
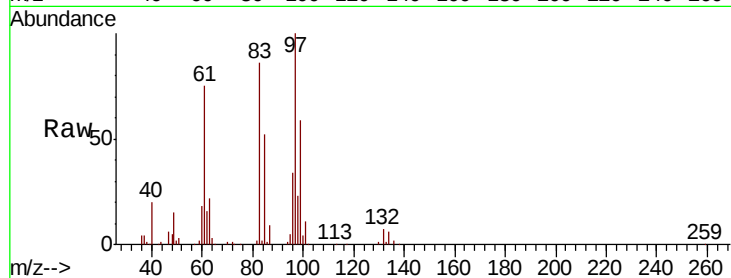




#47  
 1,1,2-Trichloroethane  
 Concen: 1.865 ppbv  
 RT: 9.61 min Scan# 2076  
 Delta R.T. -0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

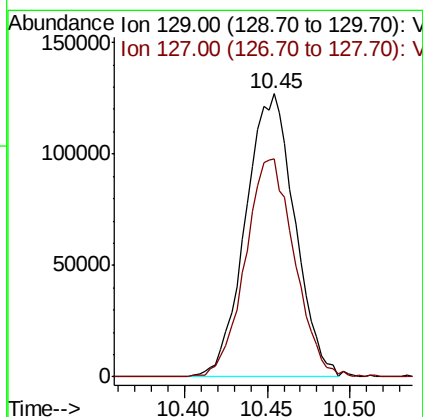
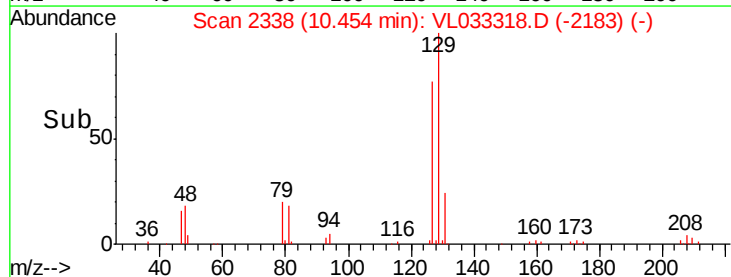
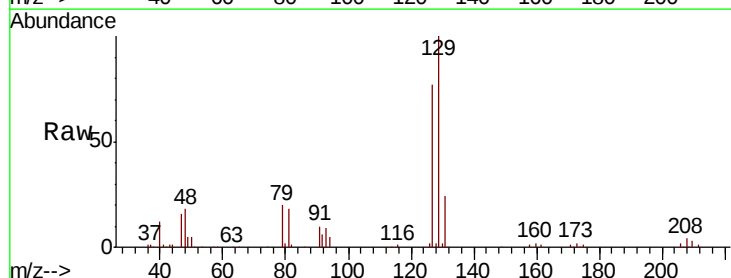
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

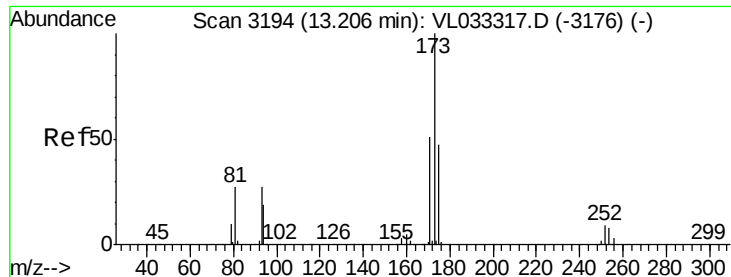
Tgt Ion: 97 Resp: 155520  
 Ion Ratio Lower Upper  
 97 100  
 83 85.8 73.6 110.4  
 85 51.5 48.0 72.0  
 99 58.7 48.1 72.1



#48  
 Dibromochloromethane  
 Concen: 1.859 ppbv  
 RT: 10.45 min Scan# 2338  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion: 129 Resp: 261799  
 Ion Ratio Lower Upper  
 129 100  
 127 77.4 38.7 116.1





#49

Bromoform

Concen: 2.049 ppbv

RT: 13.20 min Scan# 3191

Delta R.T. -0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

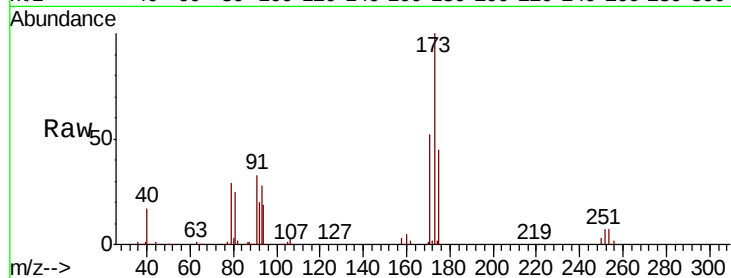
Tgt Ion: 173 Resp: 244526

Ion Ratio Lower Upper

173 100

175 50.0 38.6 58.0

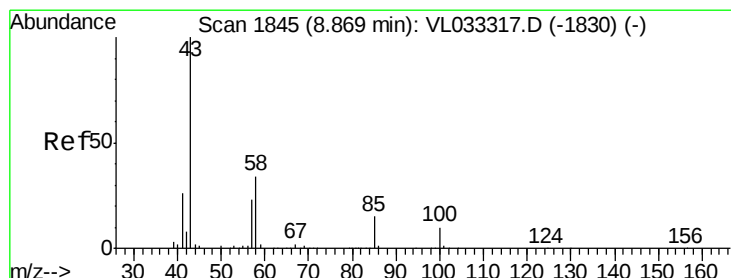
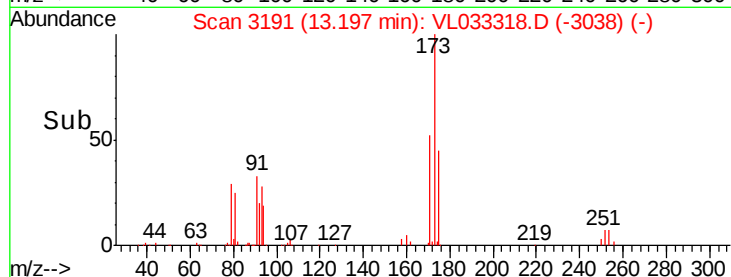
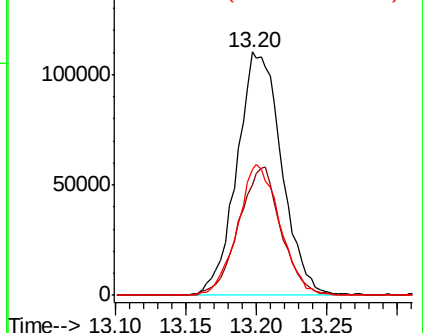
171 51.4 41.5 62.3



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: 1.967 ppbv

RT: 8.88 min Scan# 1847

Delta R.T. 0.01 min

Lab File: VL033318.D

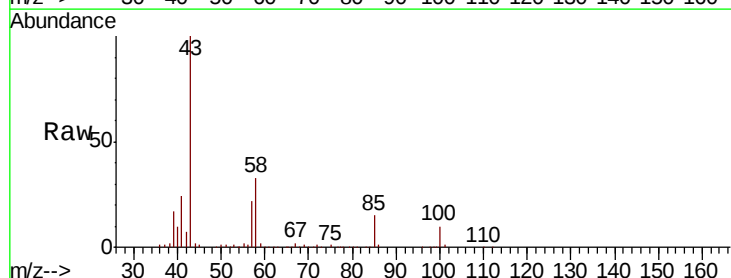
Acq: 15 Mar 2019 3:36

Tgt Ion: 43 Resp: 409216

Ion Ratio Lower Upper

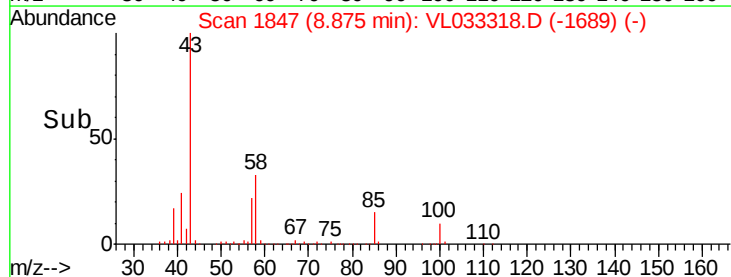
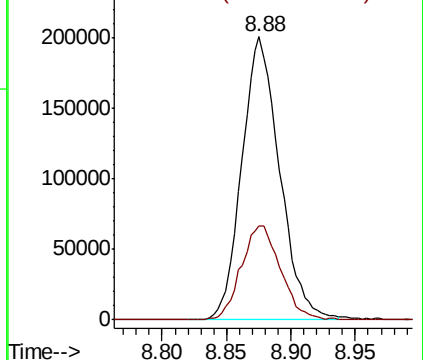
43 100

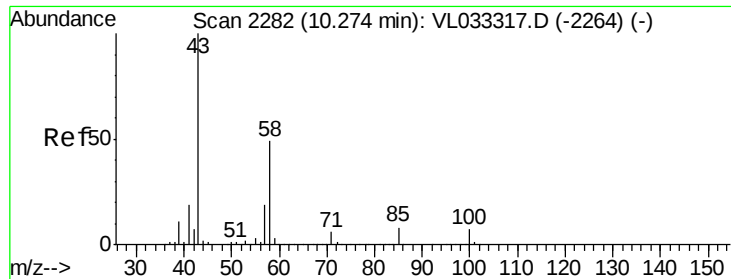
58 34.8 28.2 42.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

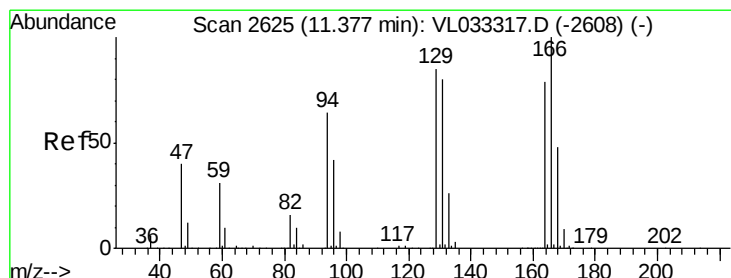
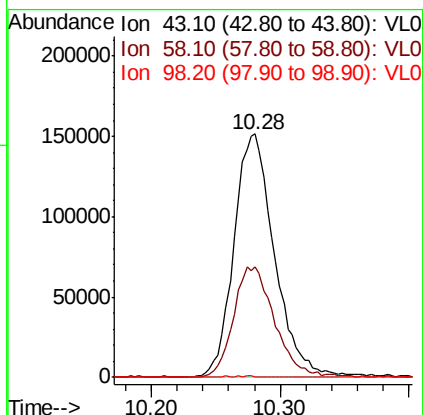
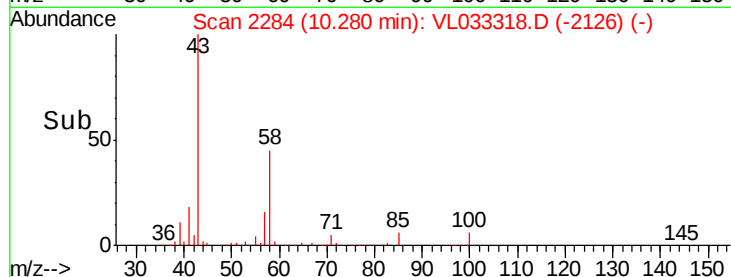
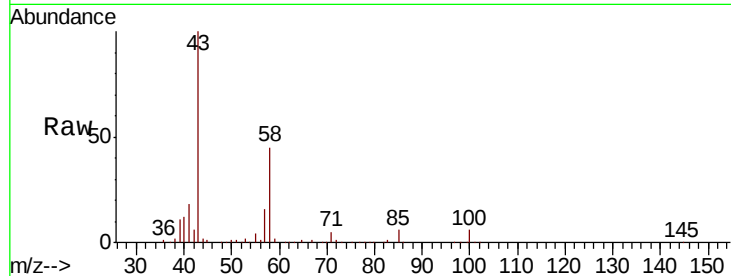




#51  
 2-Hexanone  
 Concen: 2.061 ppbv  
 RT: 10.28 min Scan# 2284  
 Delta R.T. 0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

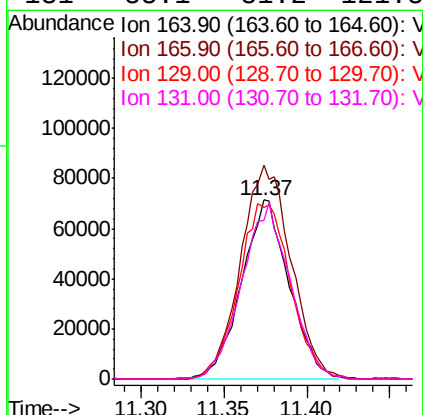
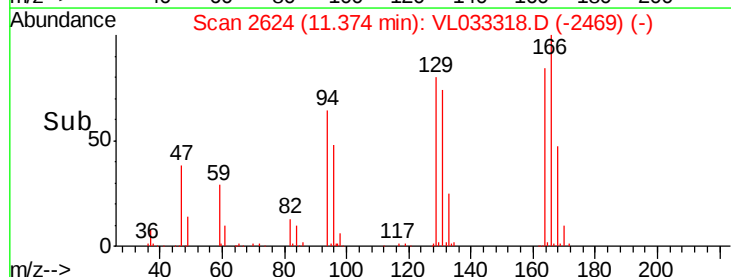
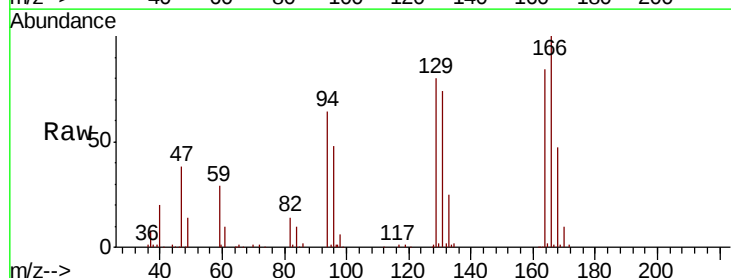
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

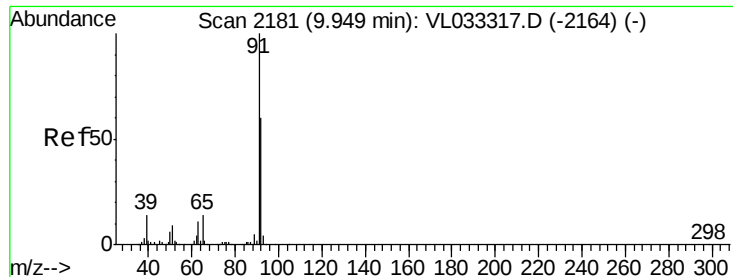
Tgt Ion: 43 Resp: 329990  
 Ion Ratio Lower Upper  
 43 100  
 58 46.3 38.0 57.0  
 98 0.2 0.1 0.1#



#52  
 Tetrachloroethene  
 Concen: 1.697 ppbv  
 RT: 11.37 min Scan# 2624  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion: 164 Resp: 141979  
 Ion Ratio Lower Upper  
 164 100  
 166 119.0 100.9 151.3  
 129 96.7 86.0 129.0  
 131 88.1 81.2 121.8





#53

Toluene

Concen: 1.900 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

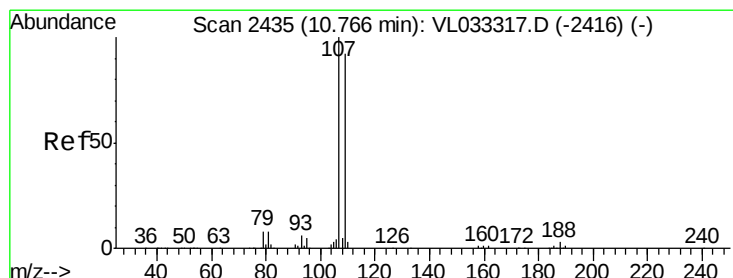
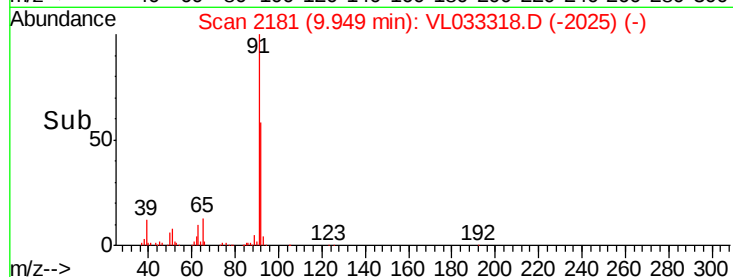
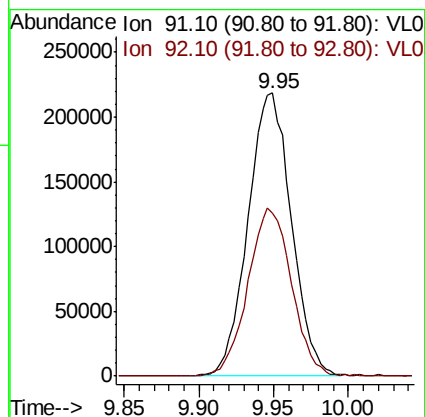
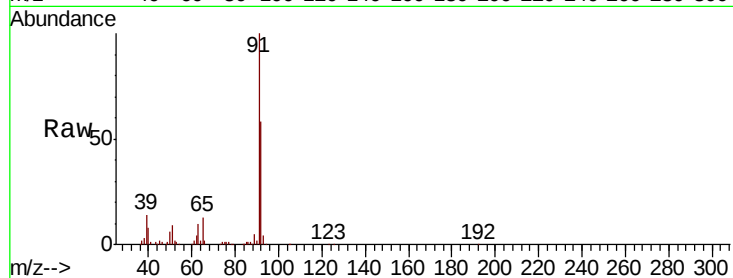
VSTDIC002

Tgt Ion: 91 Resp: 441098

Ion Ratio Lower Upper

91 100

92 59.9 47.5 71.3



#54

1,2-Dibromoethane

Concen: 1.772 ppbv

RT: 10.76 min Scan# 2434

Delta R.T. -0.00 min

Lab File: VL033318.D

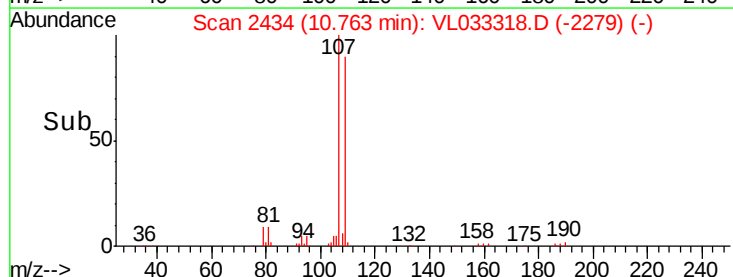
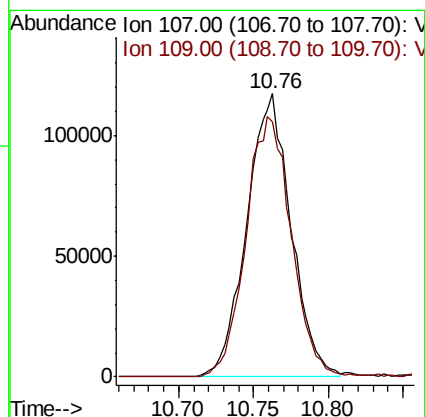
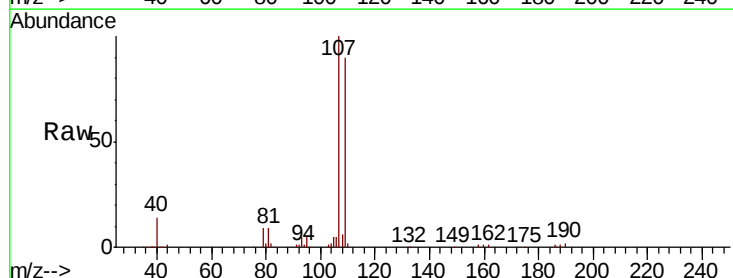
Acq: 15 Mar 2019 3:36

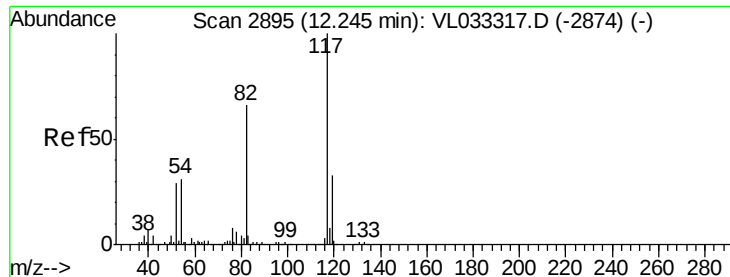
Tgt Ion: 107 Resp: 241490

Ion Ratio Lower Upper

107 100

109 90.3 73.6 110.4

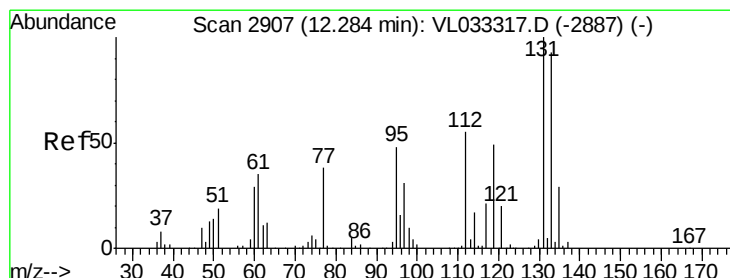
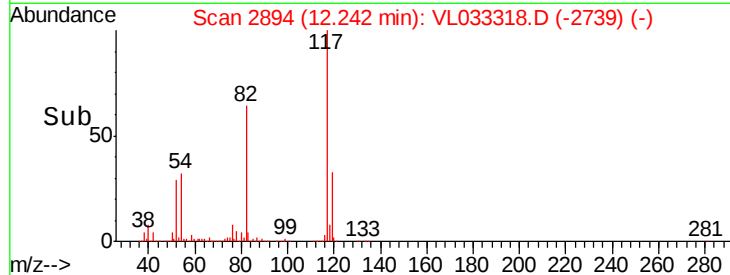
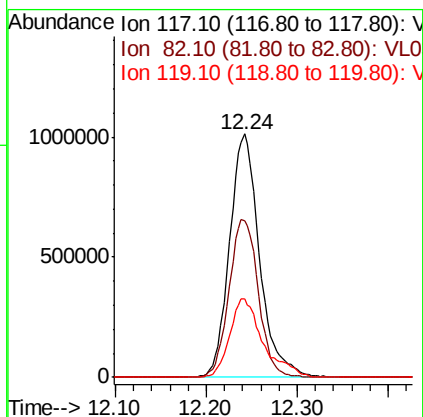
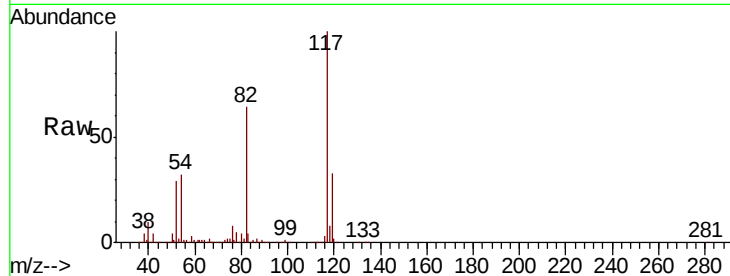




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.24 min Scan# 2894  
Delta R.T. -0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

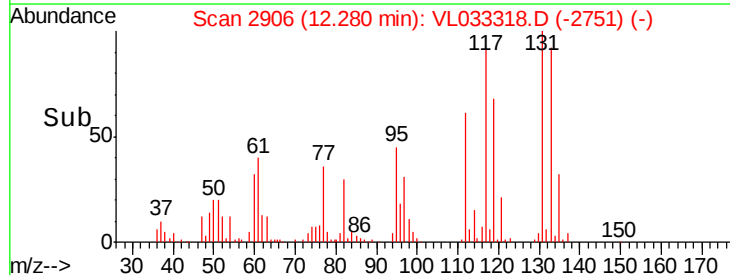
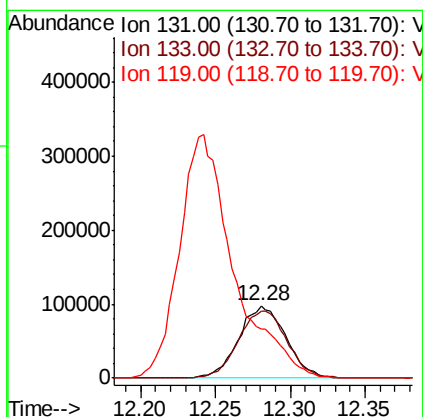
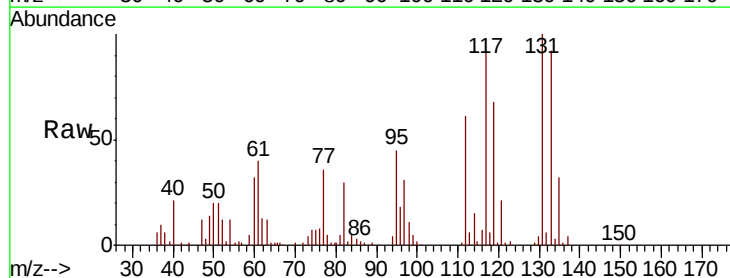
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

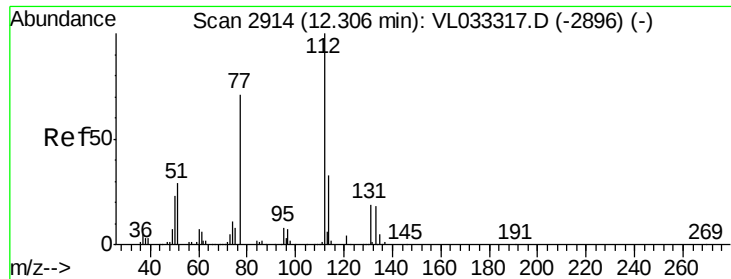
Tgt Ion:117 Resp: 2319090  
Ion Ratio Lower Upper  
117 100  
82 63.6 53.3 79.9  
119 35.9 27.7 41.5



#56  
1,1,1,2-Tetrachloroethane  
Concen: 2.045 ppbv  
RT: 12.28 min Scan# 2906  
Delta R.T. -0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Tgt Ion:131 Resp: 214325  
Ion Ratio Lower Upper  
131 100  
133 95.7 76.2 114.2  
119 389.5 48.5 72.7#

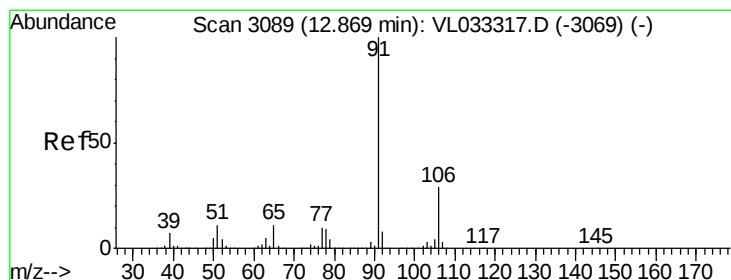
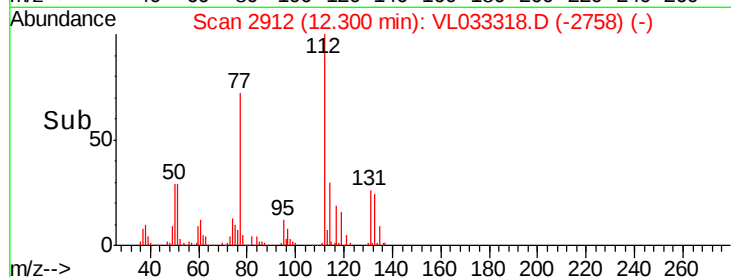
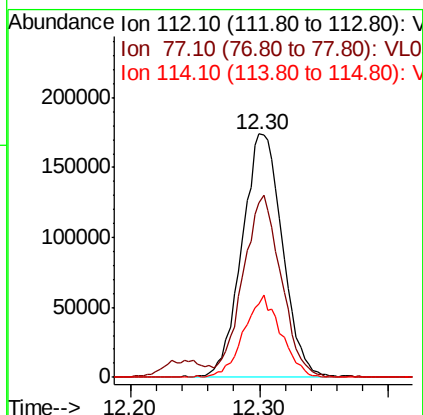
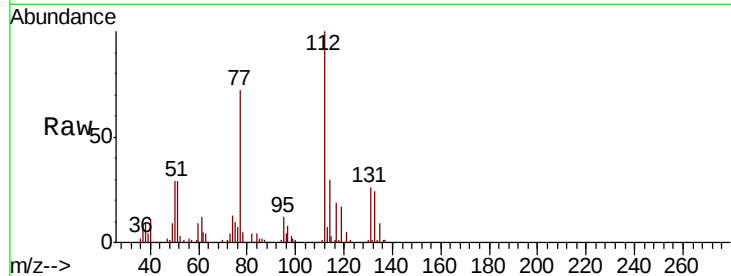




#57  
Chlorobenzene  
Concen: 2.012 ppbv  
RT: 12.30 min Scan# 2912  
Delta R.T. -0.01 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

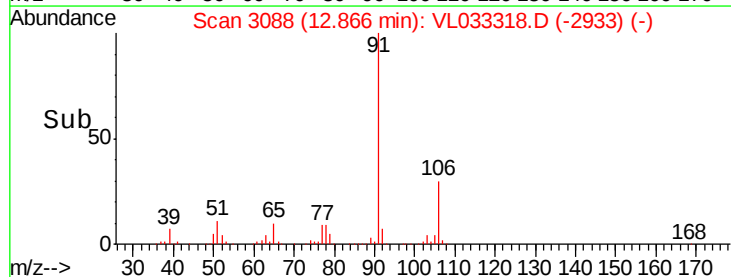
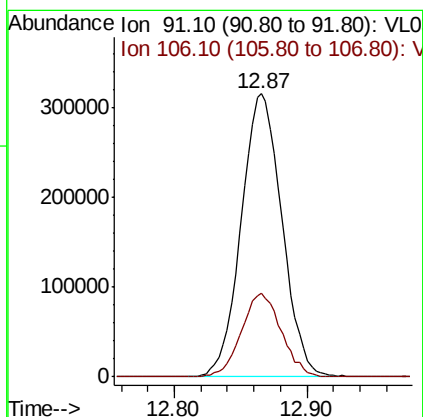
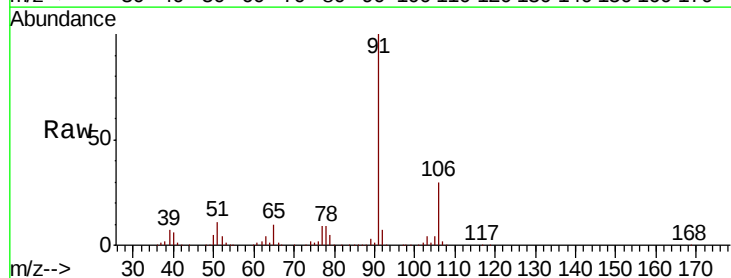
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

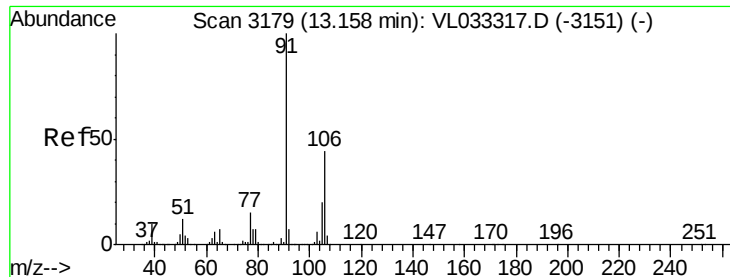
Tgt Ion: 112 Resp: 378157  
Ion Ratio Lower Upper  
112 100  
77 71.7 57.5 86.3  
114 30.4 29.7 36.3



#58  
Ethyl Benzene  
Concen: 2.019 ppbv  
RT: 12.87 min Scan# 3088  
Delta R.T. -0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Tgt Ion: 91 Resp: 674755  
Ion Ratio Lower Upper  
91 100  
106 29.8 23.6 35.4

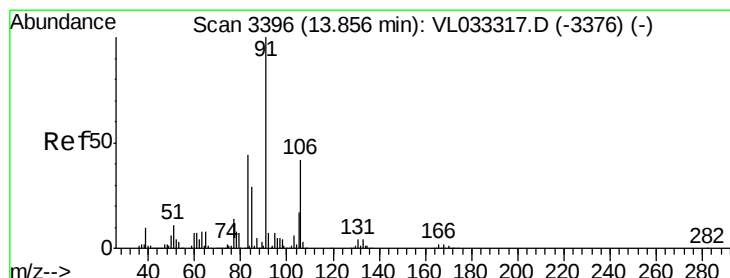
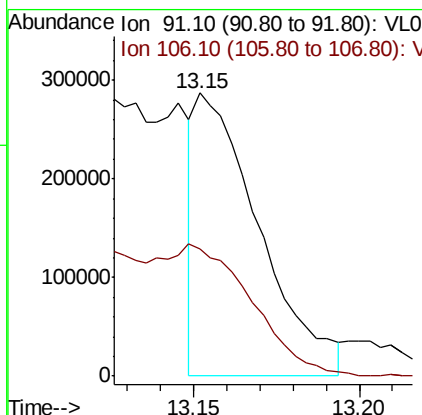
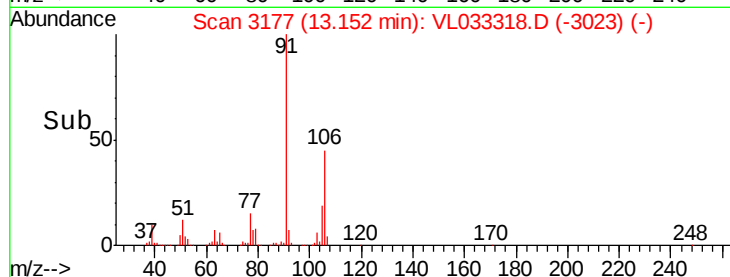
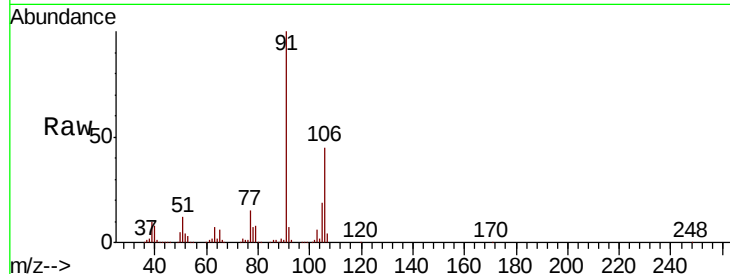




#59  
m/p-Xylene  
Concen: 1.348 ppbv  
RT: 13.15 min Scan# 3177  
Delta R.T. -0.01 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

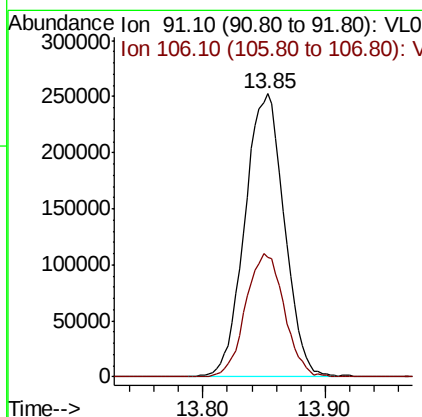
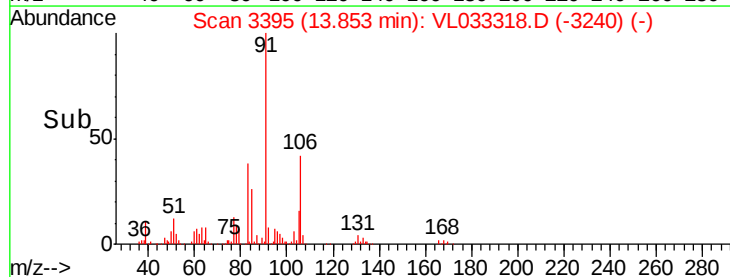
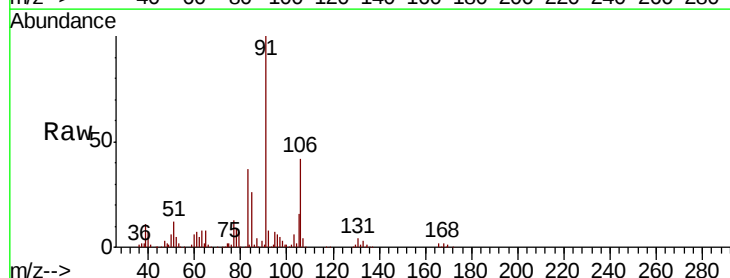
Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

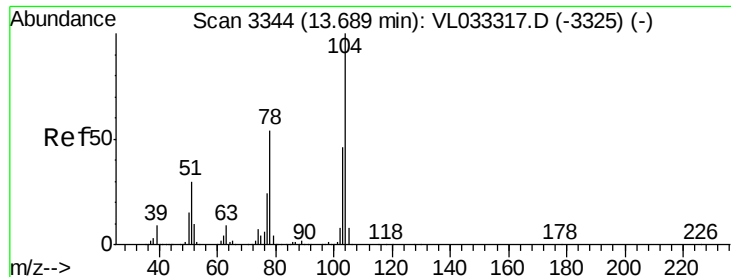
Tgt Ion: 91 Resp: 378942  
Ion Ratio Lower Upper  
91 100  
106 0.0 35.6 53.4#



#60  
o-Xylene  
Concen: 2.076 ppbv  
RT: 13.85 min Scan# 3395  
Delta R.T. -0.00 min  
Lab File: VL033318.D  
Acq: 15 Mar 2019 3:36

Tgt Ion: 91 Resp: 564749  
Ion Ratio Lower Upper  
91 100  
106 42.8 21.5 64.5





#61

Styrene

Concen: 2.066 ppbv

RT: 13.69 min Scan# 3343

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

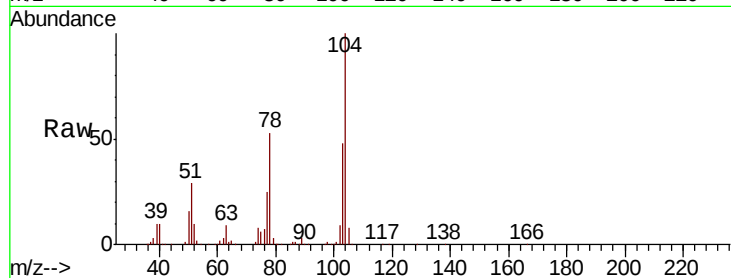
Tgt Ion:104 Resp: 393459

Ion Ratio Lower Upper

104 100

78 55.8 43.4 65.0

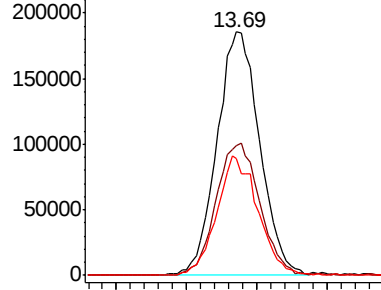
103 47.3 38.2 57.4



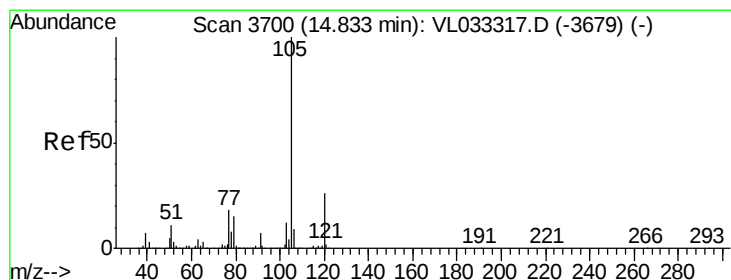
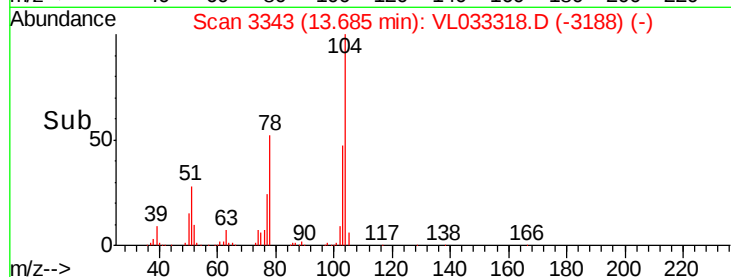
Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



Time-->



#62

Isopropylbenzene

Concen: 2.054 ppbv

RT: 14.83 min Scan# 3698

Delta R.T. -0.01 min

Lab File: VL033318.D

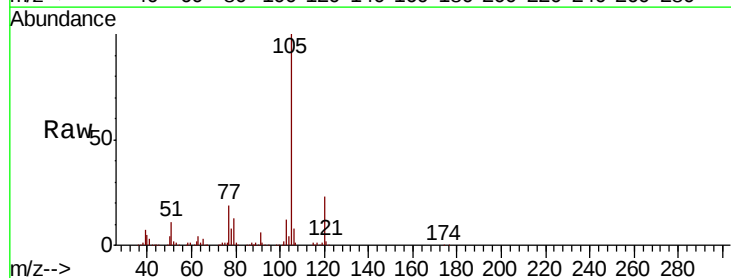
Acq: 15 Mar 2019 3:36

Tgt Ion:105 Resp: 784840

Ion Ratio Lower Upper

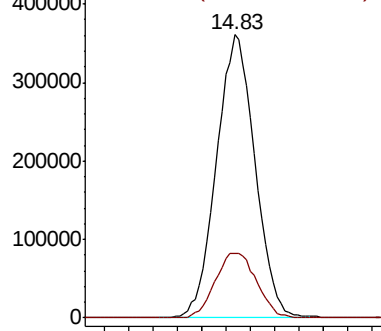
105 100

120 24.6 20.1 30.1

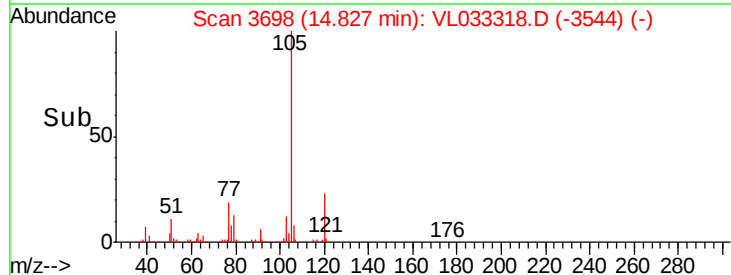


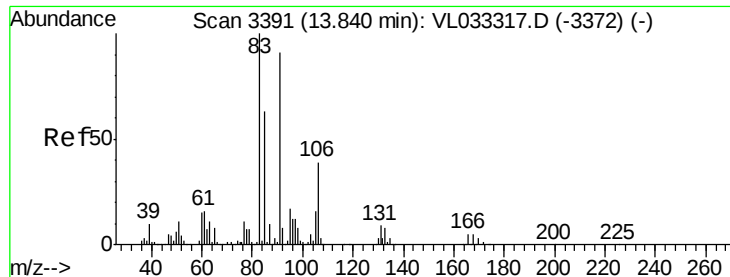
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



Time-->





#63

1,1,2,2-Tetrachloroethane

Concen: 2.013 ppbv

RT: 13.84 min Scan# 3390

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

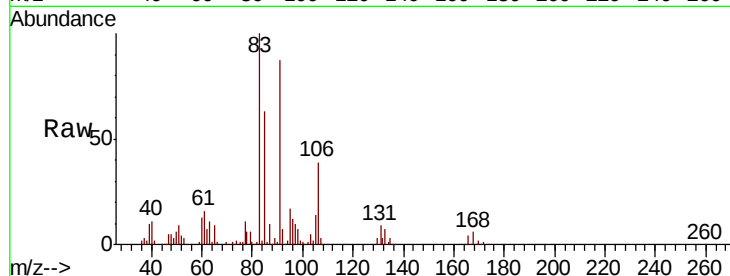
Tgt Ion: 83 Resp: 394278

Ion Ratio Lower Upper

83 100

131 9.3 4.5 13.5

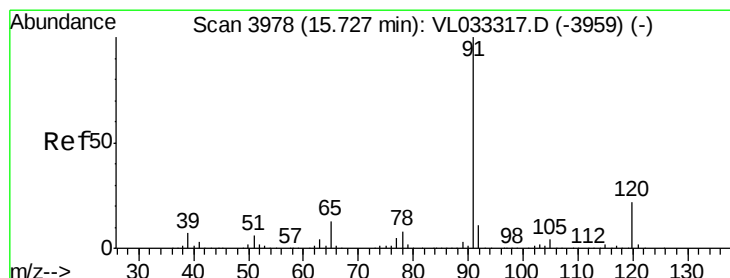
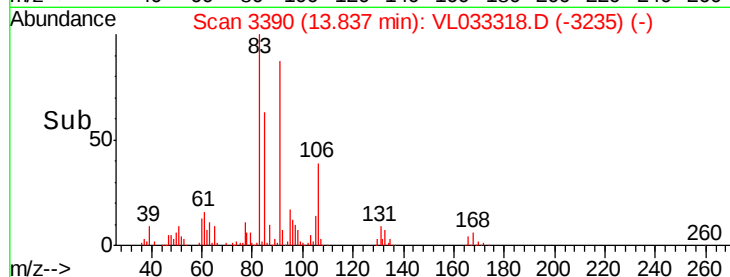
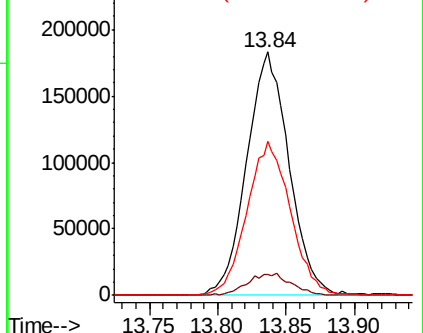
85 65.2 32.5 97.5



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: 1.430 ppbv

RT: 15.72 min Scan# 3977

Delta R.T. -0.00 min

Lab File: VL033318.D

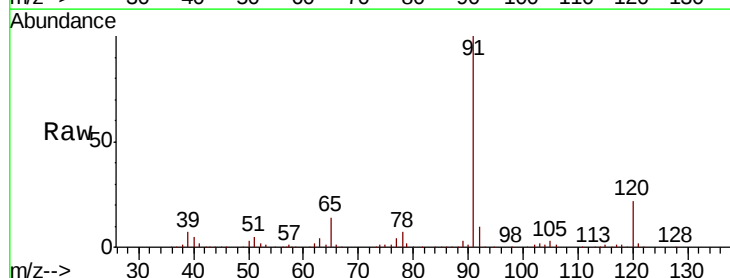
Acq: 15 Mar 2019 3:36

Tgt Ion: 120 Resp: 135898

Ion Ratio Lower Upper

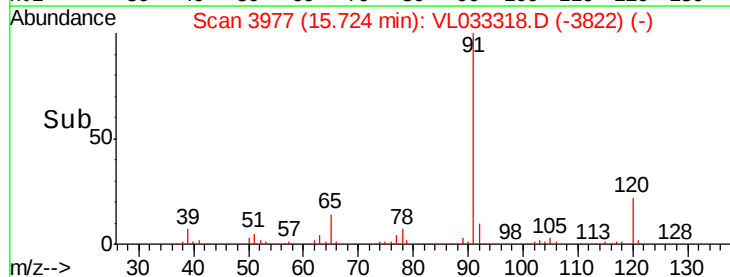
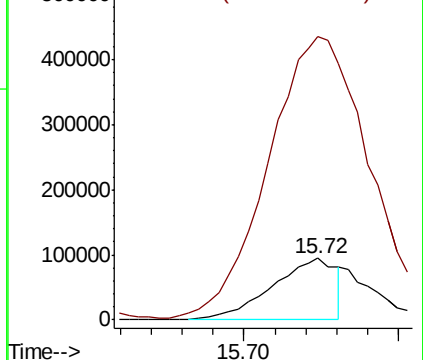
120 100

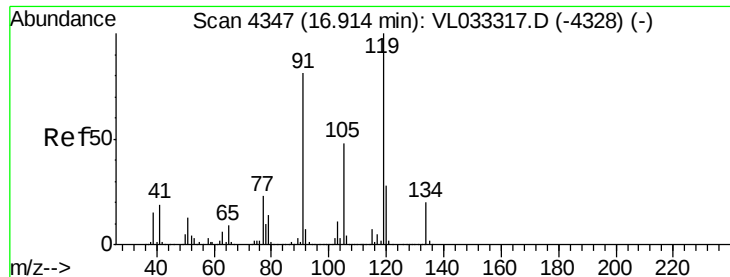
91 732.6 387.4 581.0#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

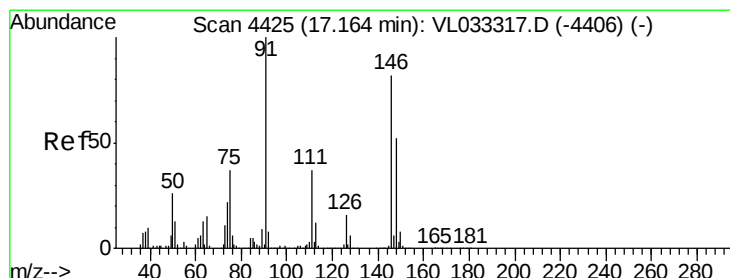
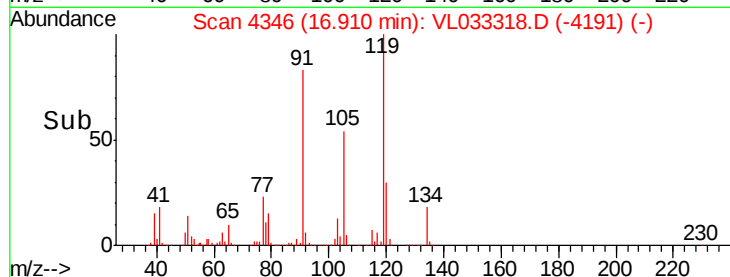
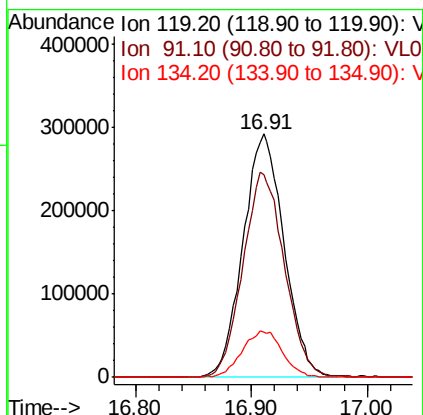
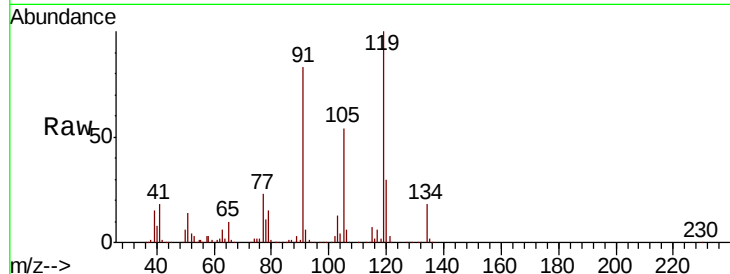




#65  
 tert-Butylbenzene  
 Concen: 2.214 ppbv  
 RT: 16.91 min Scan# 4346  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

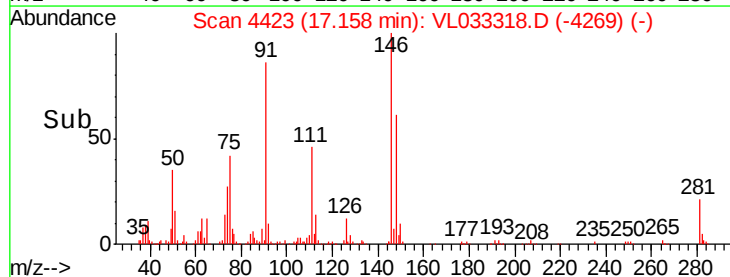
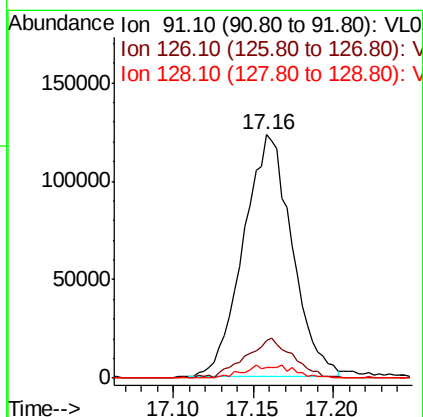
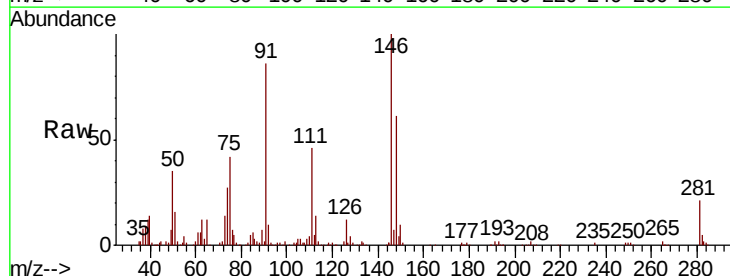
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

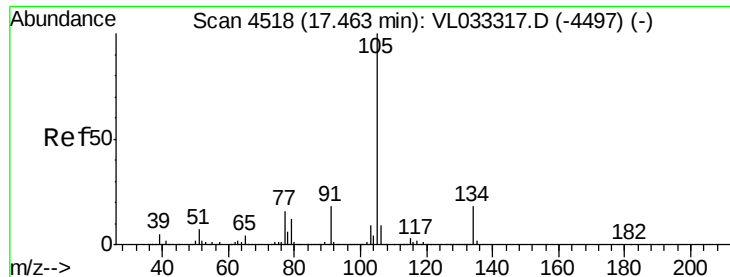
Tgt Ion: 119 Resp: 716348  
 Ion Ratio Lower Upper  
 119 100  
 91 85.4 67.5 101.3  
 134 18.7 15.5 23.3



#66  
 Benzyl Chloride  
 Concen: 1.960 ppbv  
 RT: 17.16 min Scan# 4423  
 Delta R.T. -0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion: 91 Resp: 257553  
 Ion Ratio Lower Upper  
 91 100  
 126 16.4 13.4 20.0  
 128 5.4 4.3 6.5





#67

sec-Butylbenzene

Concen: 2.177 ppbv

RT: 17.46 min Scan# 4517

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

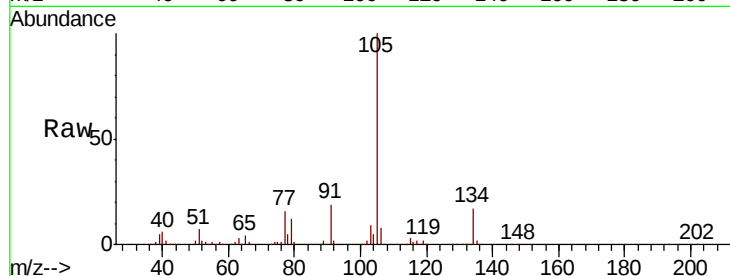
VSTDIC002

Tgt Ion: 105 Resp: 1015083

Ion Ratio Lower Upper

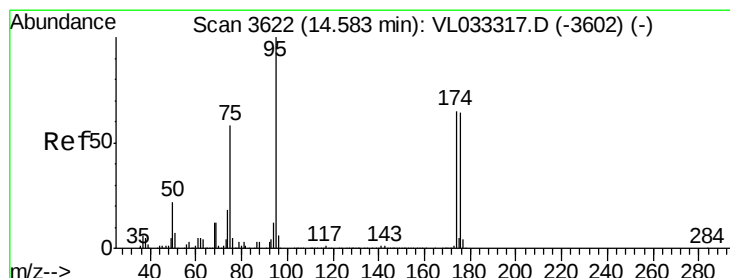
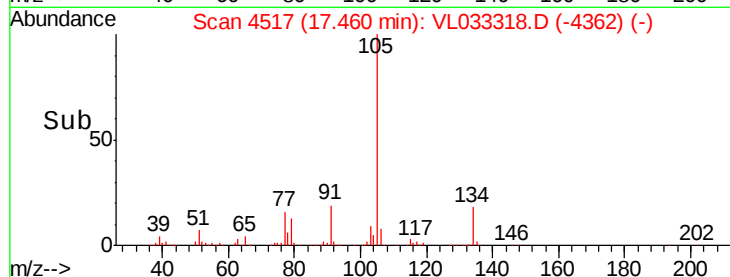
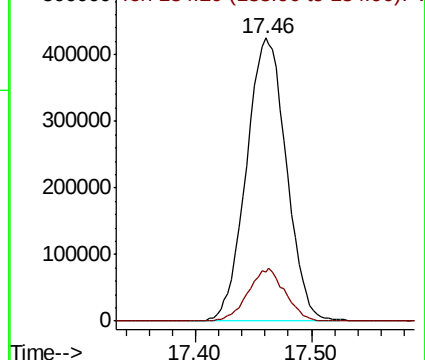
105 100

134 17.5 14.2 21.4



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: 9.389 ppbv

RT: 14.58 min Scan# 3620

Delta R.T. -0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

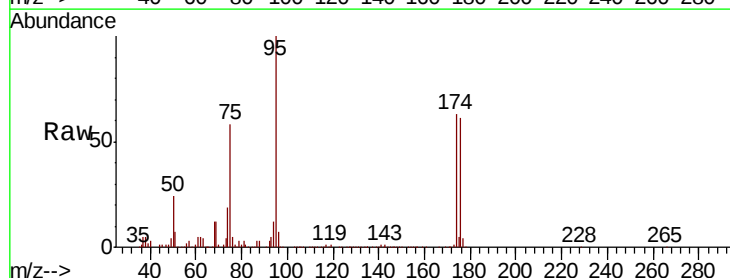
Tgt Ion: 95 Resp: 1664967

Ion Ratio Lower Upper

95 100

174 64.6 52.2 78.4

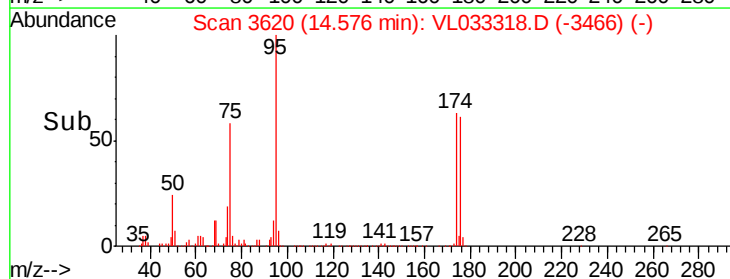
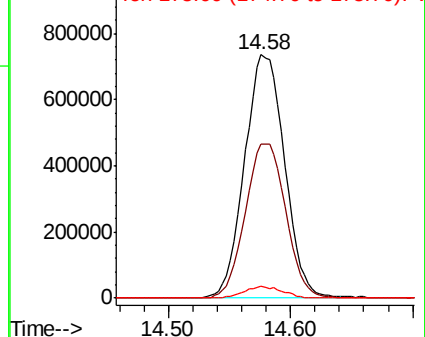
175 4.7 3.8 5.6

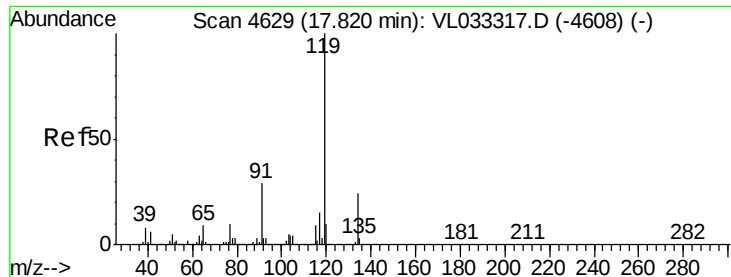


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#69

p-Isopropyltoluene

Concen: 2.236 ppbv

RT: 17.82 min Scan# 4629

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

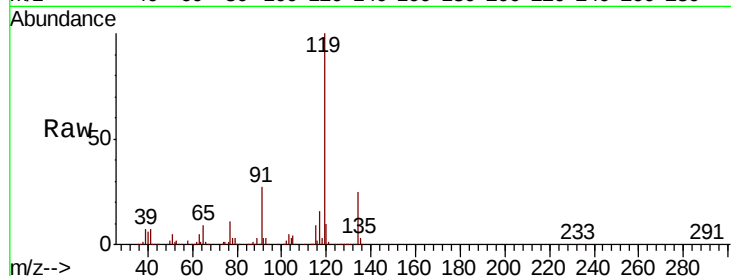
Tgt Ion: 119 Resp: 833794

Ion Ratio Lower Upper

119 100

134 24.8 19.9 29.9

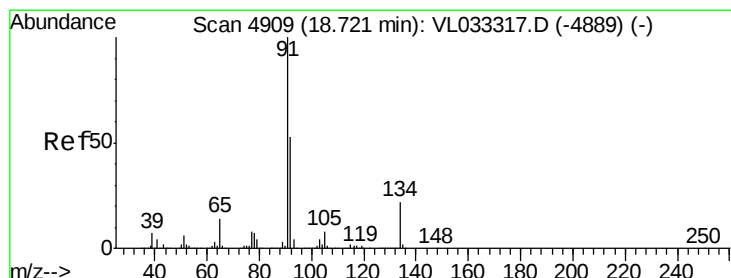
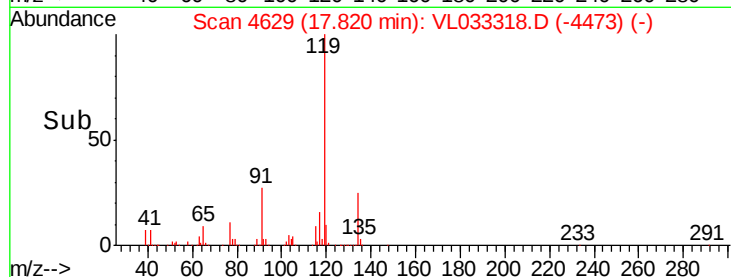
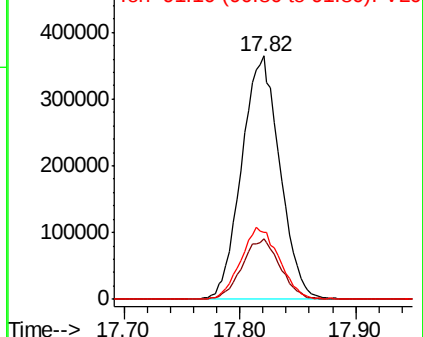
91 30.0 23.7 35.5



Abundance Ion 119.10 (118.80 to 119.80): V

Ion 134.20 (133.90 to 134.90): V

Ion 91.10 (90.80 to 91.80): V



#70

n-Butylbenzene

Concen: 1.379 ppbv

RT: 18.71 min Scan# 4907

Delta R.T. -0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

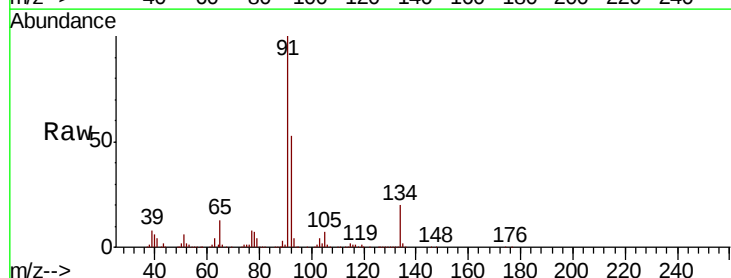
Tgt Ion: 91 Resp: 538612

Ion Ratio Lower Upper

91 100

92 0.0 42.7 64.1#

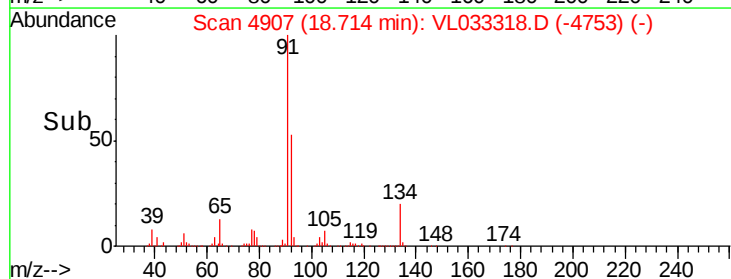
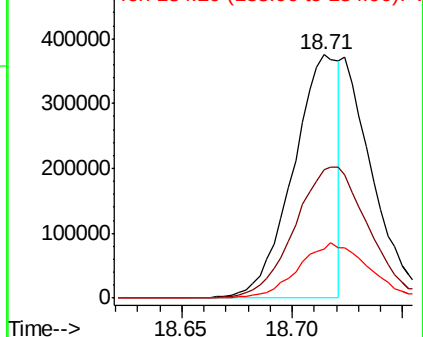
134 35.1 17.4 26.0#

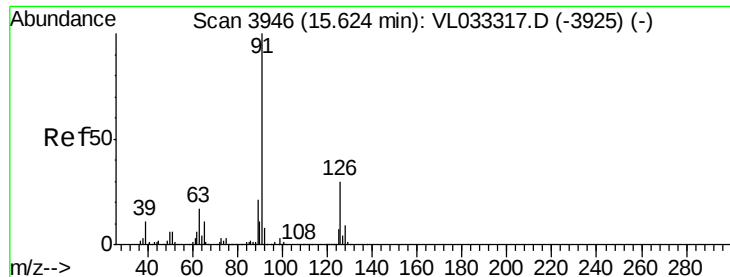


Abundance Ion 91.10 (90.80 to 91.80): V

Ion 92.10 (91.80 to 92.80): V

Ion 134.20 (133.90 to 134.90): V





#71

2-Chlorotoluene

Concen: 2.130 ppbv

RT: 15.62 min Scan# 3944

Delta R.T. -0.01 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

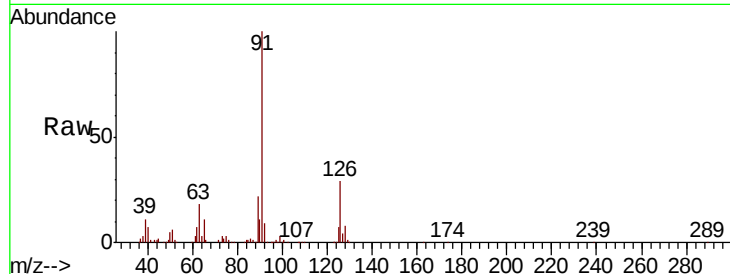
VSTDIC002

Tgt Ion: 91 Resp: 609940

Ion Ratio Lower Upper

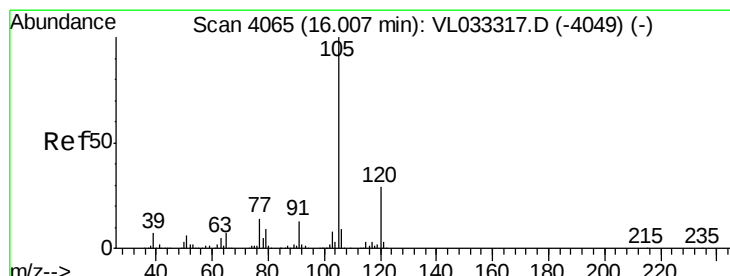
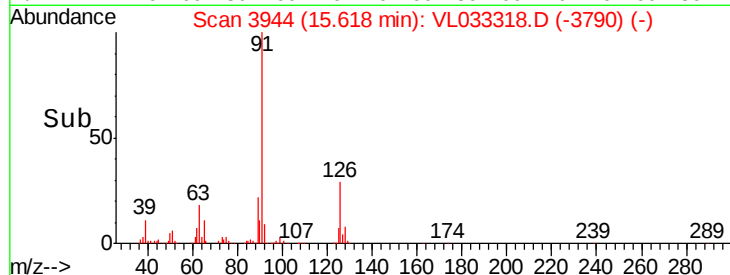
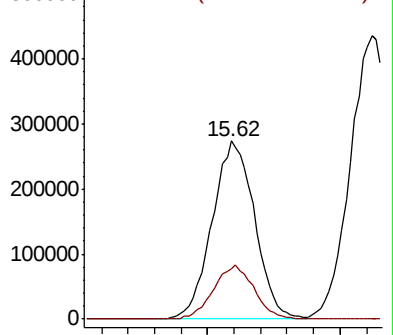
91 100

126 29.0 11.8 47.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V



#72

4-Ethyltoluene

Concen: 2.184 ppbv

RT: 16.00 min Scan# 4064

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Tgt Ion: 105 Resp: 639333

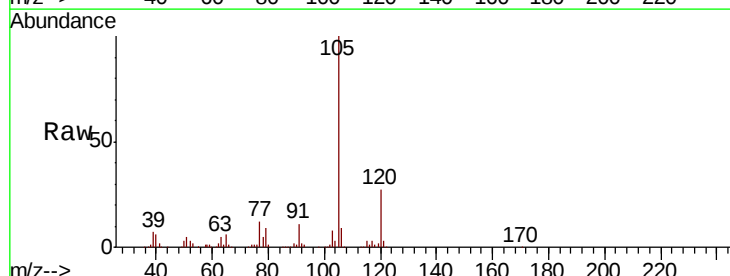
Ion Ratio Lower Upper

105 100

120 29.3 22.6 33.8

91 12.7 10.4 15.6

77 14.5 11.2 16.8

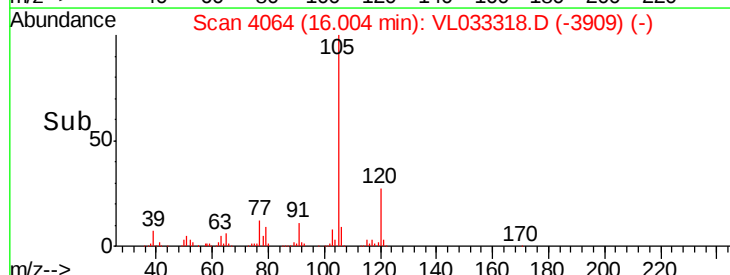
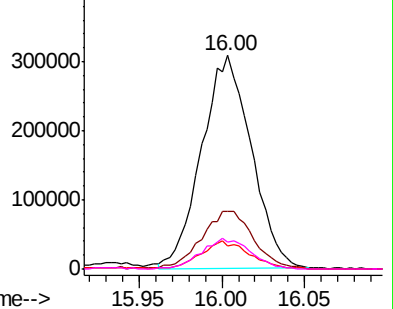


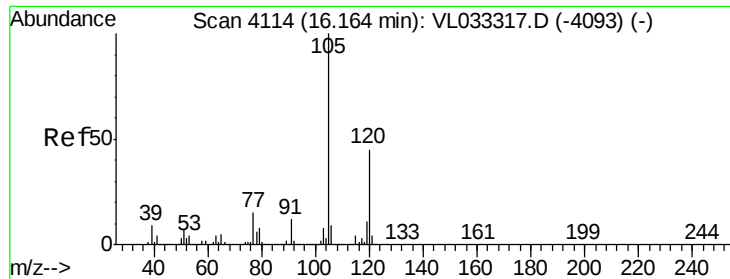
Abundance Ion 105.10 (104.80 to 105.80): V

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

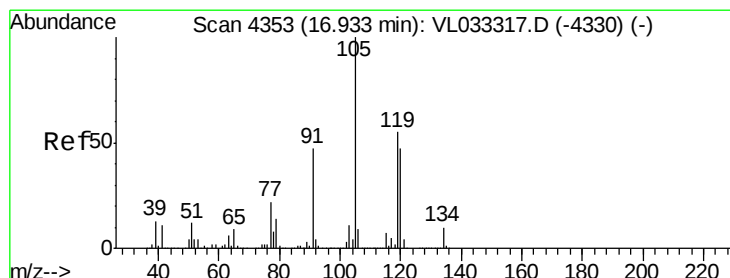
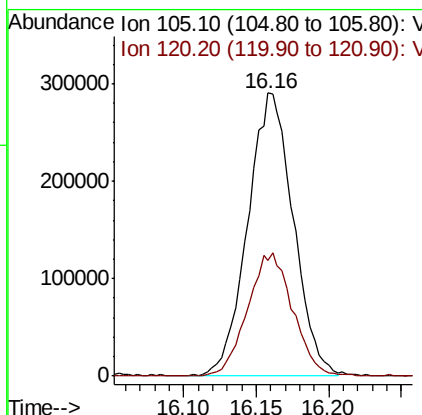
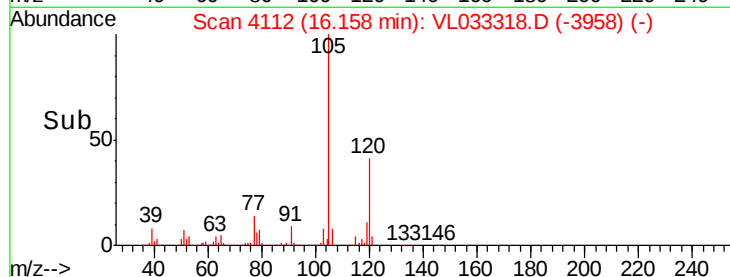
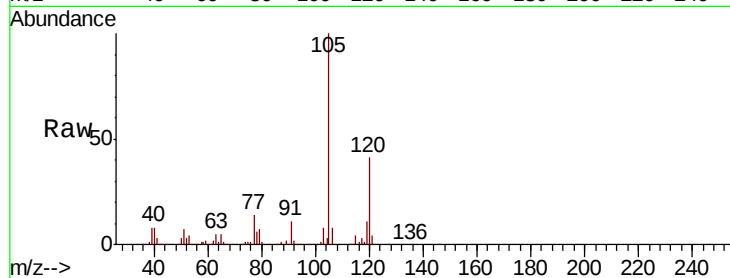




#73  
 1,3,5-Trimethylbenzene  
 Concen: 2.295 ppbv  
 RT: 16.16 min Scan# 4112  
 Delta R.T. -0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

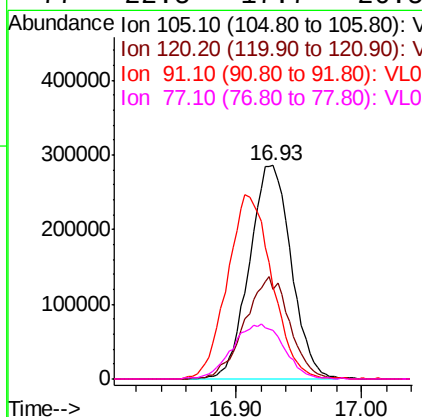
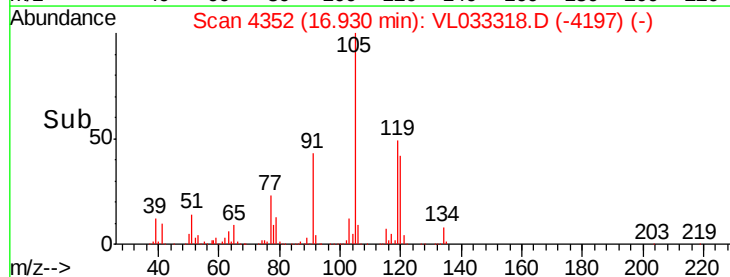
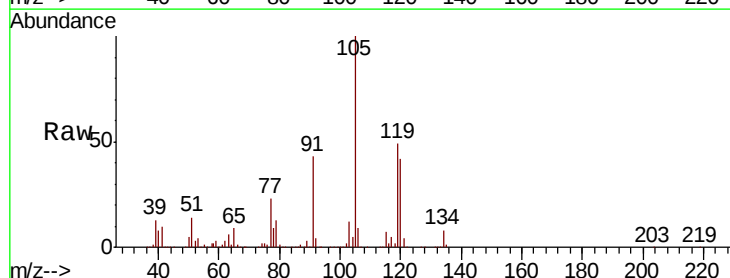
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

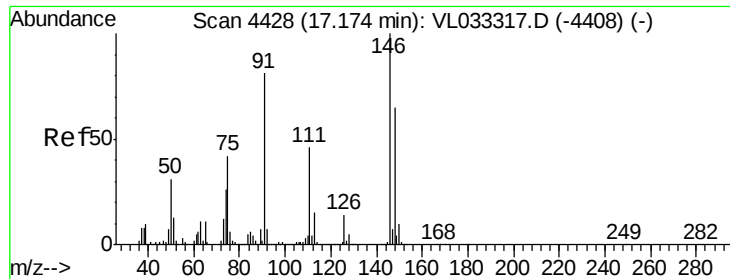
Tgt Ion:105 Resp: 631161  
 Ion Ratio Lower Upper  
 105 100  
 120 41.0 36.2 54.2



#74  
 1,2,4-Trimethylbenzene  
 Concen: 2.366 ppbv  
 RT: 16.93 min Scan# 4352  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion:105 Resp: 664446  
 Ion Ratio Lower Upper  
 105 100  
 120 41.9 37.2 55.8  
 91 42.6 38.1 57.1  
 77 22.5 17.7 26.5

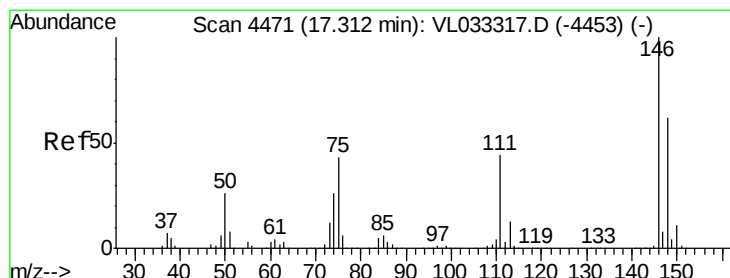
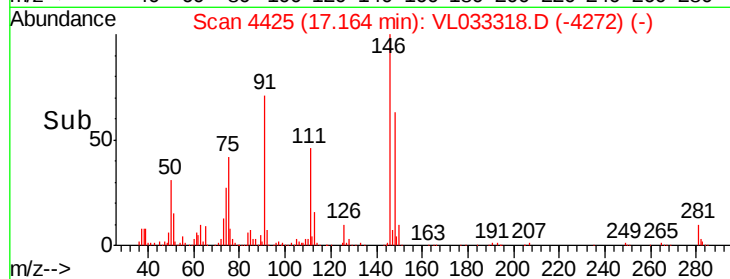
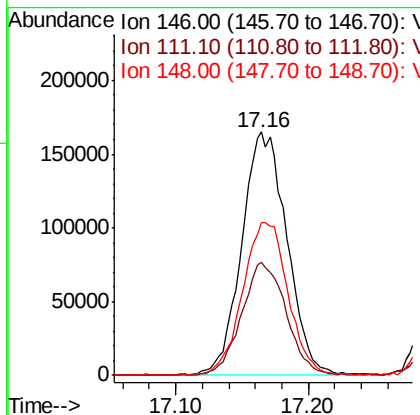
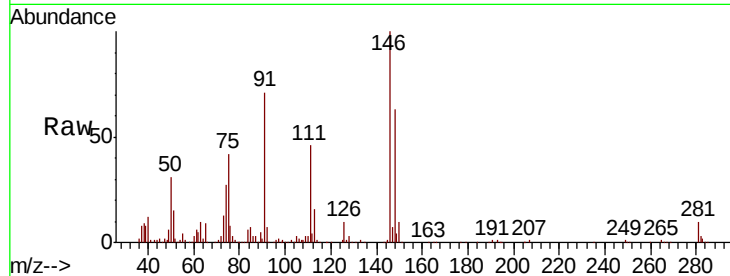




#75  
 1,3-Dichlorobenzene  
 Concen: 2.215 ppbv  
 RT: 17.16 min Scan# 4425  
 Delta R.T. -0.01 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

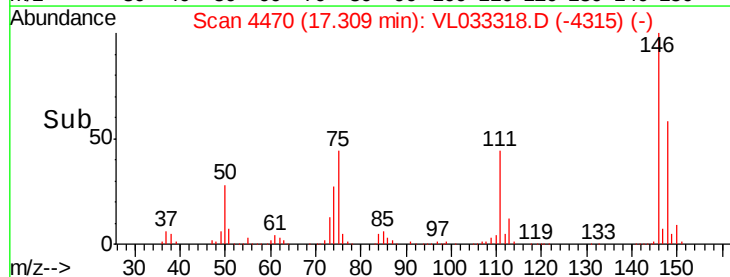
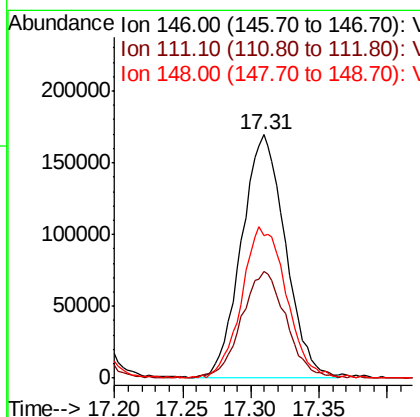
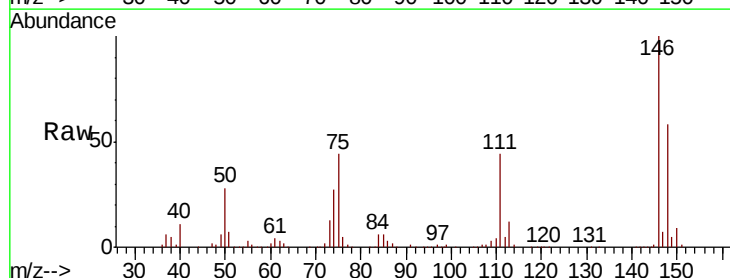
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

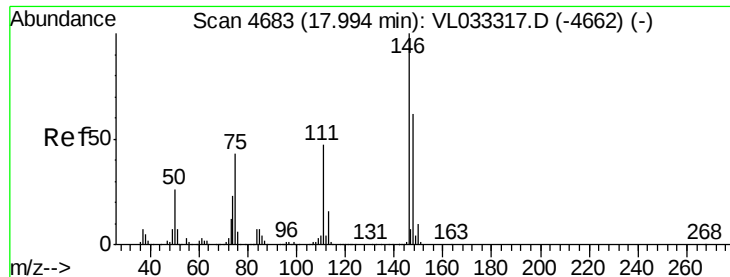
Tgt Ion:146 Resp: 389460  
 Ion Ratio Lower Upper  
 146 100  
 111 46.0 22.9 68.7  
 148 63.5 32.2 96.6



#76  
 1,4-Dichlorobenzene  
 Concen: 2.191 ppbv  
 RT: 17.31 min Scan# 4470  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Tgt Ion:146 Resp: 376331  
 Ion Ratio Lower Upper  
 146 100  
 111 45.0 22.5 67.5  
 148 63.9 32.3 96.8





#77

1,2-Dichlorobenzene

Concen: 2.150 ppbv

RT: 17.99 min Scan# 4682

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

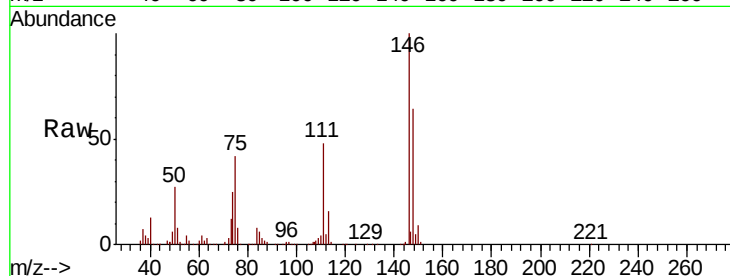
Tgt Ion:146 Resp: 369252

Ion Ratio Lower Upper

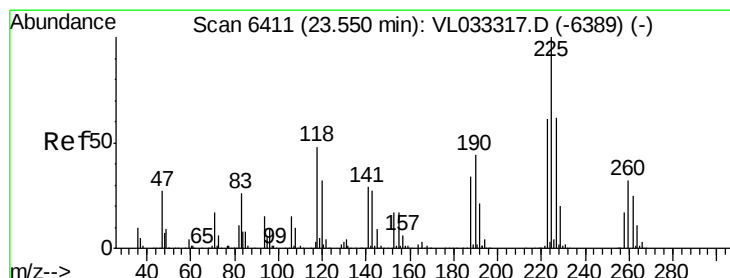
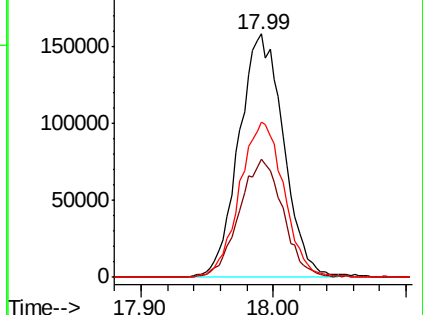
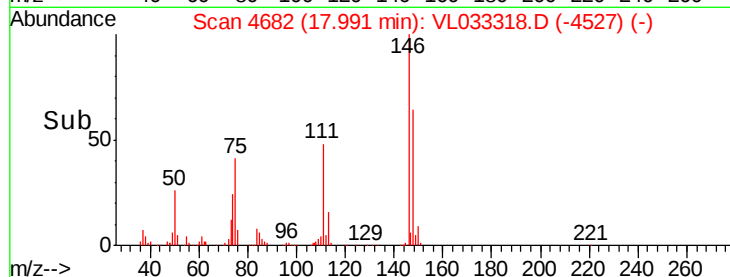
146 100

111 47.7 23.6 71.0

148 63.7 31.6 95.0



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: 1.926 ppbv

RT: 23.55 min Scan# 6410

Delta R.T. -0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

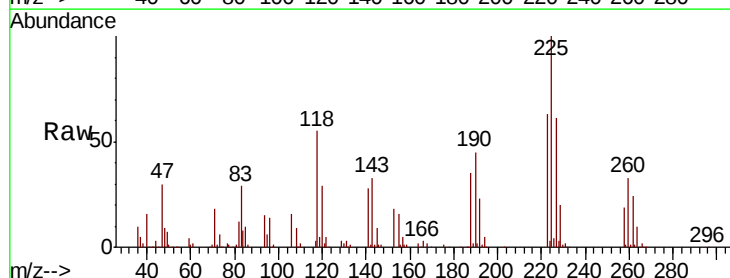
Tgt Ion:225 Resp: 227137

Ion Ratio Lower Upper

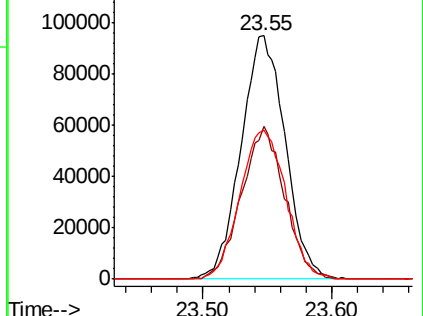
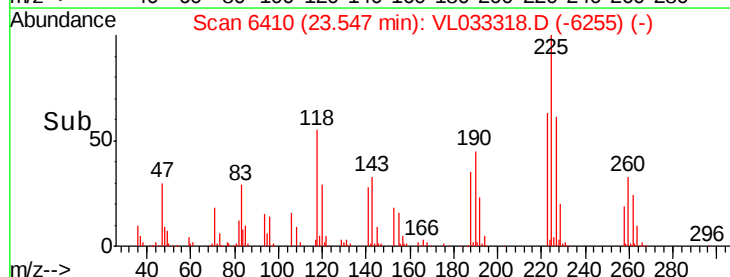
225 100

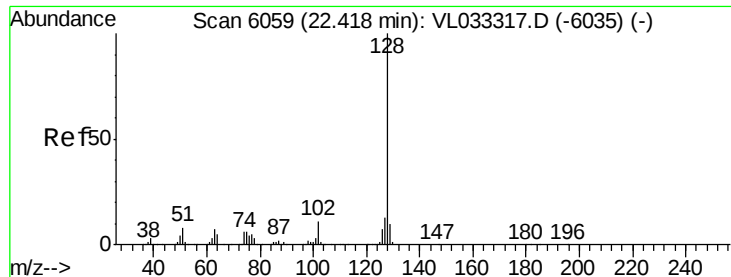
223 61.2 50.5 75.7

227 63.5 50.9 76.3



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: 2.951 ppbv

RT: 22.42 min Scan# 6059

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

Instrument :

MSVOA\_L

ClientSampleId :

VSTDIC002

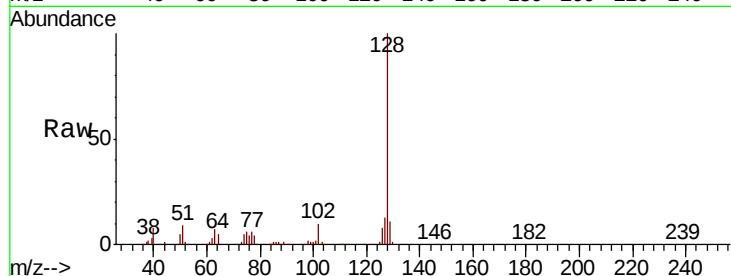
Tgt Ion:128 Resp: 673738

Ion Ratio Lower Upper

128 100

127 12.4 10.5 15.7

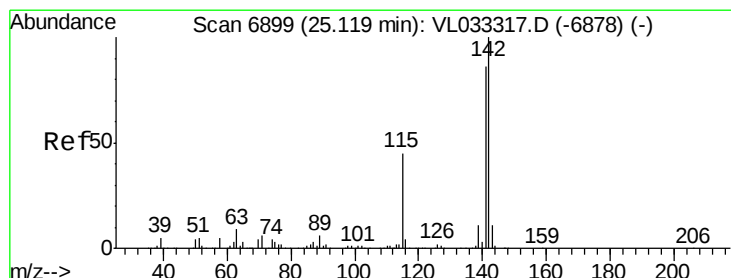
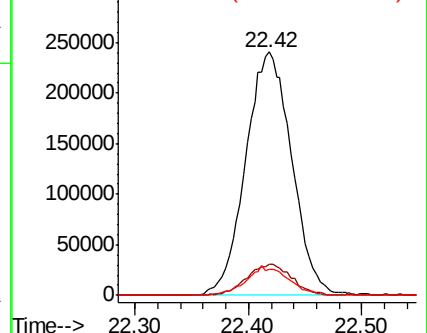
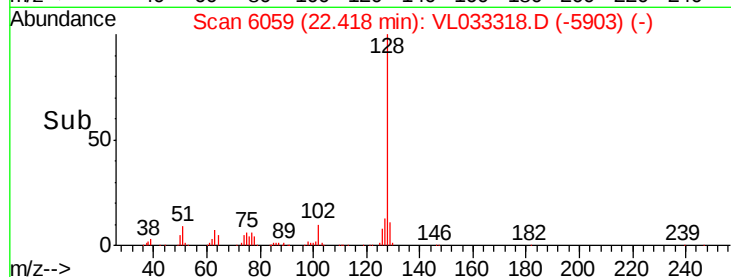
129 10.7 8.3 12.5



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: 5.894 ppbv

RT: 25.12 min Scan# 6899

Delta R.T. 0.00 min

Lab File: VL033318.D

Acq: 15 Mar 2019 3:36

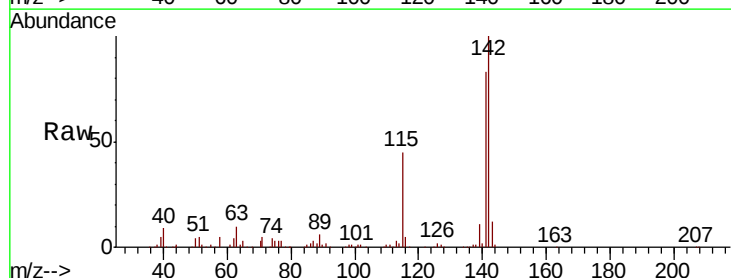
Tgt Ion:142 Resp: 389247

Ion Ratio Lower Upper

142 100

141 85.0 67.4 101.0

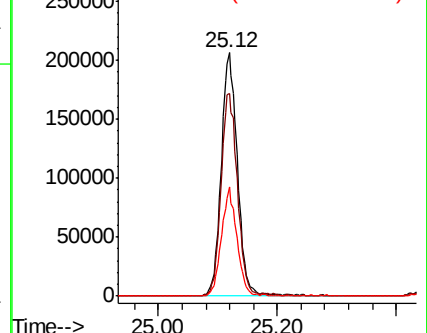
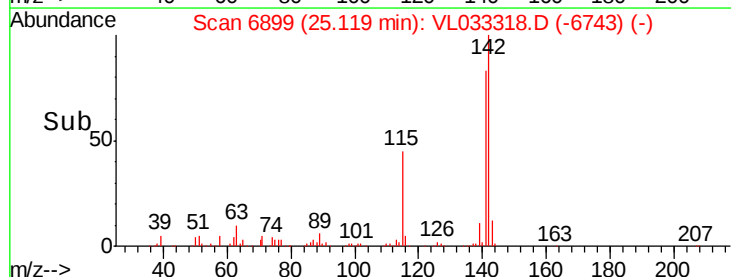
115 42.6 33.8 50.8

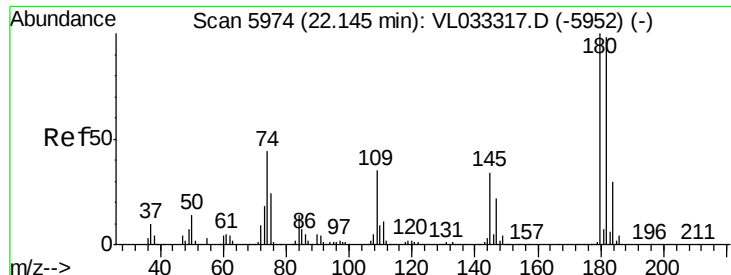


Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V





#81  
 1,2,4-Trichlorobenzene  
 Concen: 2.657 ppbv  
 RT: 22.14 min Scan# 5973  
 Delta R.T. -0.00 min  
 Lab File: VL033318.D  
 Acq: 15 Mar 2019 3:36

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 180   | Resp: | 345184 |
| Ion      | Ratio | Lower | Upper  |
| 180      | 100   |       |        |
| 182      | 96.1  | 76.6  | 114.8  |
| 184      | 29.9  | 24.3  | 36.5   |

