

Data File : VV010572.D  
Acq On : 30 Apr 2019 02:06  
Operator : SY/MD  
Sample : VSTDCCC005EC  
Misc : 25mL/MSVOA\_V/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00552

Quant Time: Apr 30 06:52:17 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR042719WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Apr 30 06:45:30 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 223587   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 214072   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 107965   | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 51451    | 4.73     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 94.60%  |
| 7) Chloroethane-d5             | 1.57   | 69    | 31797    | 5.46     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 109.20% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 88772    | 4.34     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 86.80%  |
| 20) 2-Butanone-d5              | 3.94   | 46    | 126552   | 45.12    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 90.24%  |
| 24) Chloroform-d               | 4.40   | 84    | 148145   | 5.08     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 101.60% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 68965    | 5.13     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 102.60% |
| 32) Benzene-d6                 | 5.10   | 84    | 274549   | 5.20     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 104.00% |
| 36) 1,2-Dichloropropane-d6     | 6.12   | 67    | 73887    | 4.90     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 98.00%  |
| 41) Toluene-d8                 | 7.36   | 98    | 279555   | 5.54     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 110.80% |
| 43) trans-1,3-Dichloropropene- | 7.66   | 79    | 28128    | 4.89     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 97.80%  |
| 46) 2-Hexanone-d5              | 8.13   | 63    | 110024   | 45.27    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 90.54%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 58332    | 4.88     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 97.60%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 111175   | 5.34     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 106.80% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 87895  | 4.897 ug/L  | 96     |
| 3) Chloromethane               | 1.25 | 50  | 53334  | 4.482 ug/L  | 99     |
| 5) Vinyl chloride              | 1.32 | 62  | 59950  | 4.816 ug/L  | 97     |
| 6) Bromomethane                | 1.53 | 94  | 25293  | 4.693 ug/L  | 97     |
| 8) Chloroethane                | 1.59 | 64  | 28337  | 5.652 ug/L  | 95     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 118669 | 4.864 ug/L  | 98     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 52803  | 4.363 ug/L  | 98     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 47552  | 4.405 ug/L  | 97     |
| 13) Acetone                    | 2.20 | 43  | 52429  | 37.522 ug/L | 93     |
| 14) Carbon disulfide           | 2.32 | 76  | 114296 | 4.194 ug/L  | 95     |
| 15) Methyl Acetate             | 2.46 | 43  | 20797  | 4.486 ug/L  | 96     |
| 16) Methylene chloride         | 2.53 | 84  | 77523  | 4.748 ug/L  | 98     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 145390 | 4.651 ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 75484  | 4.894 ug/L  | 94     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 124581 | 4.899 ug/L  | 97     |
| 21) 2-Butanone                 | 4.03 | 43  | 123790 | 42.864 ug/L | 95     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 87611  | 5.262 ug/L  | 99     |

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Apr 30 06:45:30 2019  
Response via : Initial Calibration

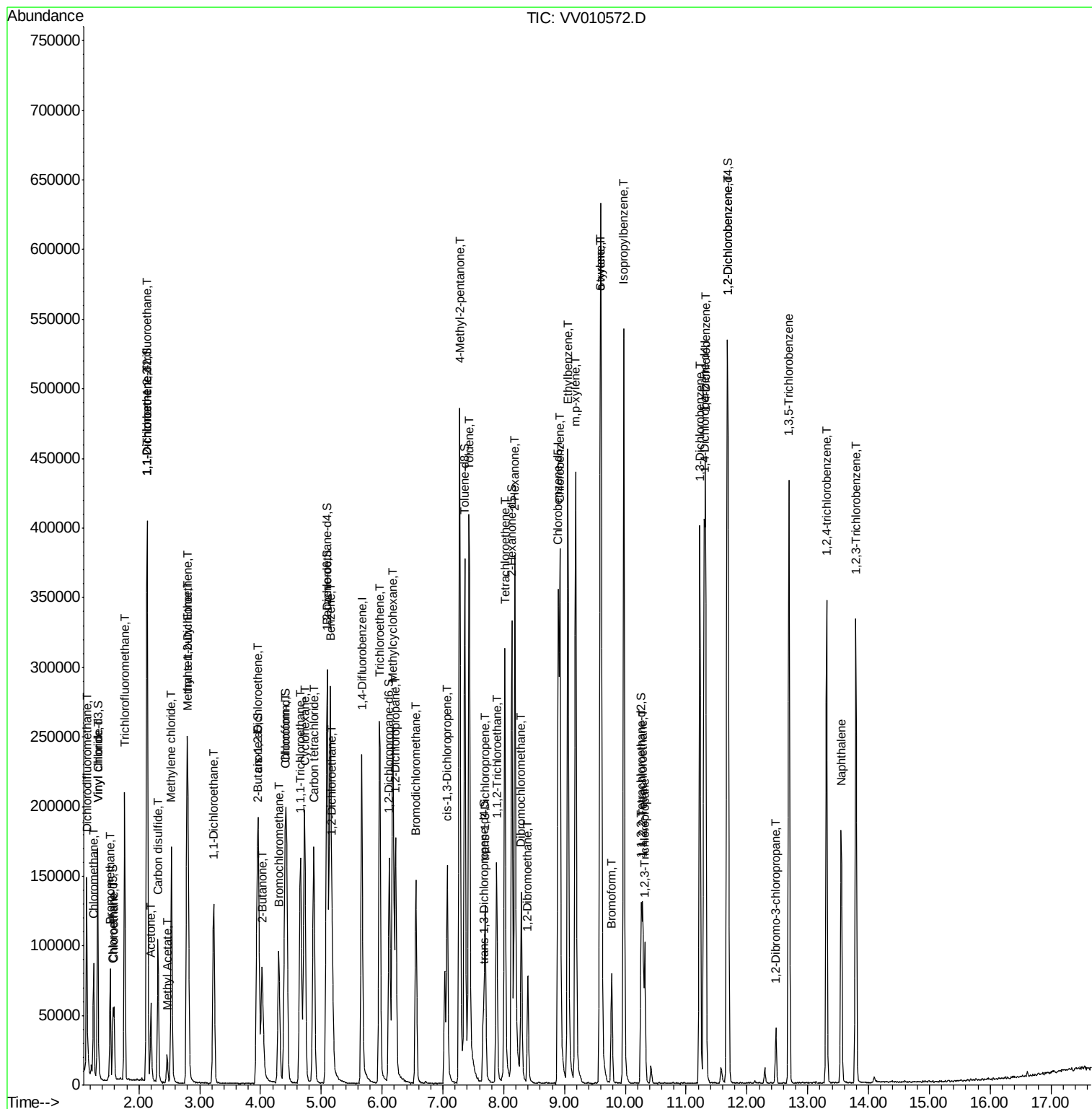
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 38336    | 4.926  | ug/L   | 90       |
| 25) Chloroform                 | 4.43  | 83   | 145628   | 5.048  | ug/L   | 100      |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 80344    | 4.891  | ug/L   | 99       |
| 29) 1,1,1-Trichloroethane      | 4.66  | 97   | 132896   | 5.301  | ug/L   | 99       |
| 30) Cyclohexane                | 4.72  | 56   | 93230    | 5.131  | ug/L   | 99       |
| 31) Carbon tetrachloride       | 4.88  | 117  | 128943   | 5.378  | ug/L   | 98       |
| 33) Benzene                    | 5.15  | 78   | 288381   | 5.207  | ug/L   | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 89840    | 5.573  | ug/L   | 99       |
| 35) Methylcyclohexane          | 6.18  | 83   | 106864   | 5.108  | ug/L   | 97       |
| 37) 1,2-Dichloropropane        | 6.22  | 63   | 65634    | 5.140  | ug/L # | 97       |
| 38) Bromodichloromethane       | 6.56  | 83   | 96909    | 5.286  | ug/L   | 96       |
| 39) cis-1,3-Dichloropropene    | 7.07  | 75   | 93330    | 5.062  | ug/L   | 97       |
| 40) 4-Methyl-2-pentanone       | 7.27  | 43   | 309603   | 45.720 | ug/L   | 99       |
| 42) Toluene                    | 7.43  | 91   | 326059   | 5.364  | ug/L   | 99       |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 74069    | 5.110  | ug/L   | 97       |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 53574    | 4.949  | ug/L   | 93       |
| 47) Tetrachloroethene          | 8.02  | 164  | 77986    | 5.179  | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.18  | 43   | 223910   | 47.391 | ug/L   | 96       |
| 49) Dibromochloromethane       | 8.29  | 129  | 68998    | 5.184  | ug/L   | 97       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 50461    | 5.047  | ug/L   | 99       |
| 51) Chlorobenzene              | 8.93  | 112  | 221408   | 5.188  | ug/L   | 98       |
| 52) Ethylbenzene               | 9.05  | 91   | 344469   | 5.378  | ug/L   | 99       |
| 53) m,p-xylene                 | 9.18  | 106  | 140658   | 5.590  | ug/L   | 93       |
| 54) o-xylene                   | 9.59  | 106  | 137093   | 5.573  | ug/L   | 100      |
| 55) Styrene                    | 9.60  | 104  | 221273   | 5.438  | ug/L   | 97       |
| 56) Isopropylbenzene           | 9.97  | 105  | 355868   | 5.519  | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 54373    | 4.605  | ug/L   | 97       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 39098    | 4.781  | ug/L   | 99       |
| 61) Bromoform                  | 9.78  | 173  | 36898    | 5.259  | ug/L   | 98       |
| 62) 1,3-Dichlorobenzene        | 11.22 | 146  | 177657   | 5.334  | ug/L   | 100      |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 175055   | 5.126  | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 175752   | 5.359  | ug/L   | 96       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 9309     | 5.138  | ug/L   | 94       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 143427   | 5.136  | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 110089   | 5.165  | ug/L   | 99       |
| 69) Naphthalene                | 13.55 | 128  | 148000   | 4.669  | ug/L   | 98       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 107016   | 5.048  | ug/L   | 99       |

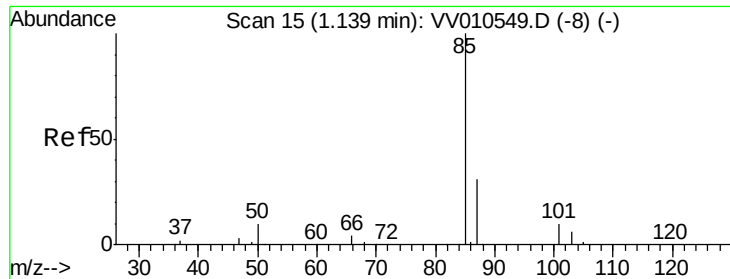
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#2

Dichlorodifluoromethane

Concen: 4.897 ug/L

RT: 1.14 min Scan# 16

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

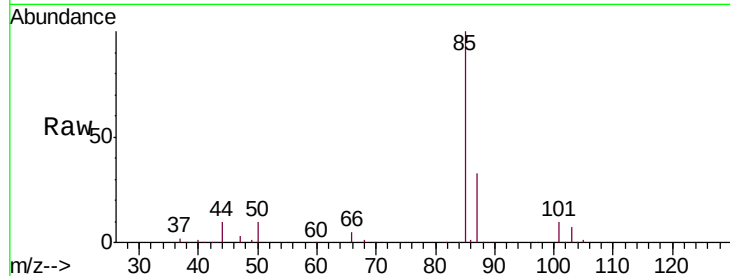
VSTD00552

Tgt Ion: 85 Resp: 87895

Ion Ratio Lower Upper

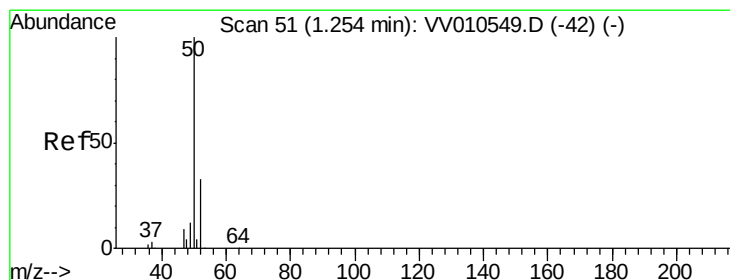
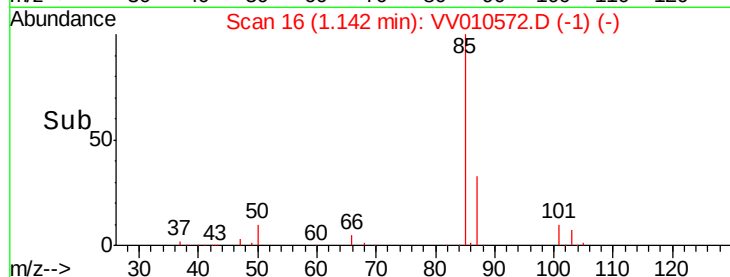
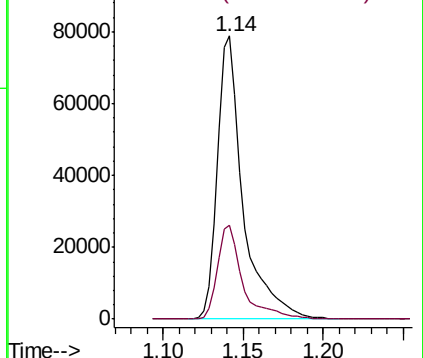
85 100

87 32.4 24.1 36.1



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#3

Chloromethane

Concen: 4.482 ug/L

RT: 1.25 min Scan# 51

Delta R.T. -0.00 min

Lab File: VV010572.D

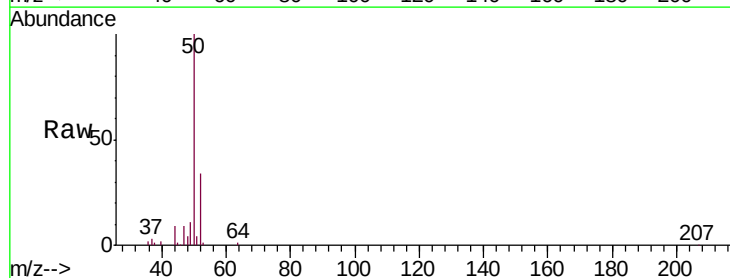
Acq: 30 Apr 2019 02:06

Tgt Ion: 50 Resp: 53334

Ion Ratio Lower Upper

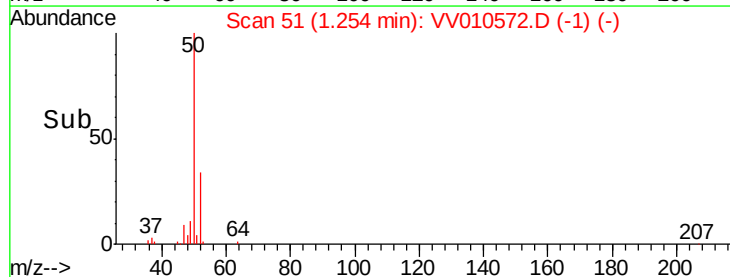
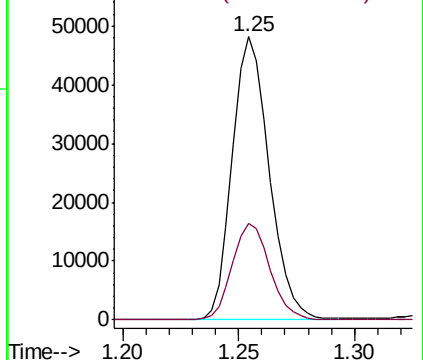
50 100

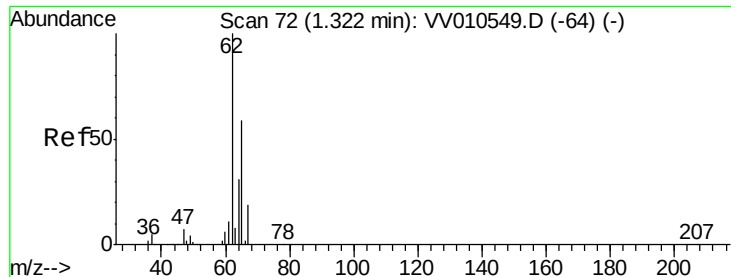
52 33.9 23.3 43.3



Abundance Ion 50.05 (49.75 to 50.75): VV0

Ion 52.05 (51.75 to 52.75): VV0





#5

Vinyl chloride

Concen: 4.816 ug/L

RT: 1.32 min Scan# 73

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

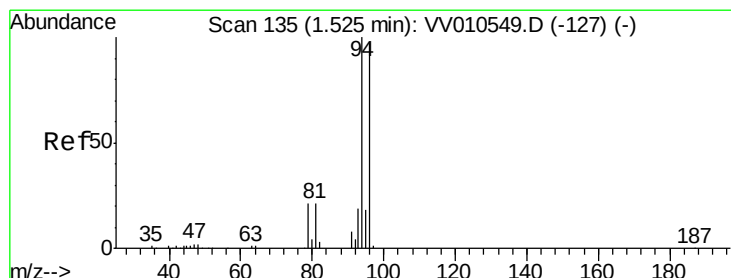
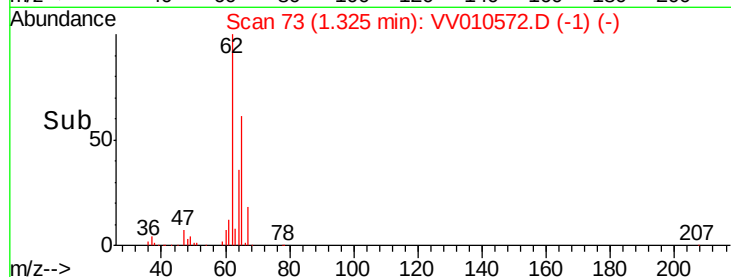
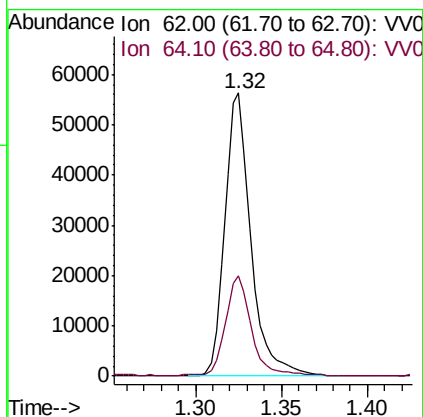
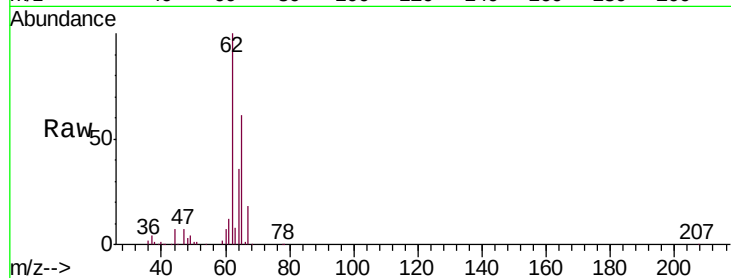
VSTD00552

Tgt Ion: 62 Resp: 59950

Ion Ratio Lower Upper

62 100

64 35.6 23.9 44.5



#6

Bromomethane

Concen: 4.693 ug/L

RT: 1.53 min Scan# 136

Delta R.T. 0.00 min

Lab File: VV010572.D

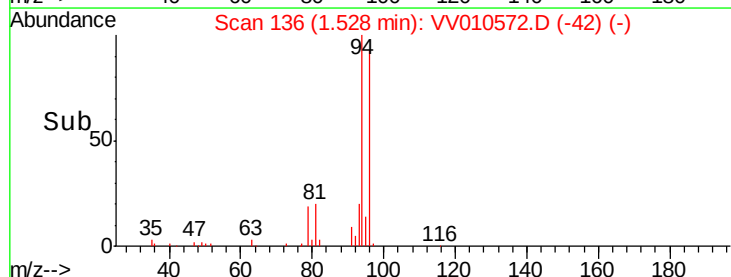
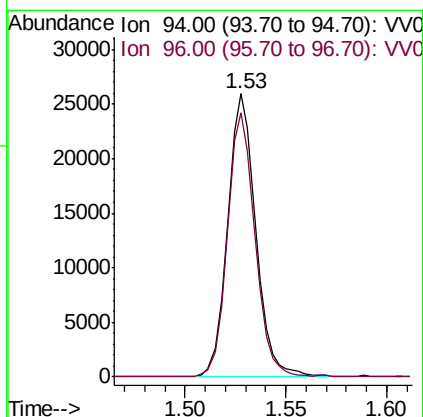
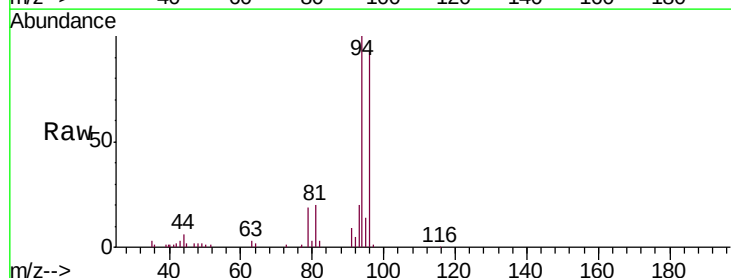
Acq: 30 Apr 2019 02:06

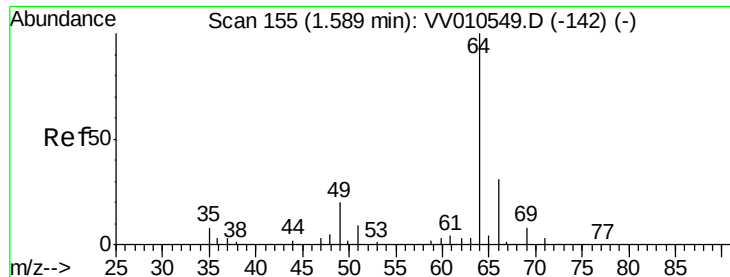
Tgt Ion: 94 Resp: 25293

Ion Ratio Lower Upper

94 100

96 93.2 66.9 124.3





#8

Chloroethane

Concen: 5.652 ug/L

RT: 1.59 min Scan# 156

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

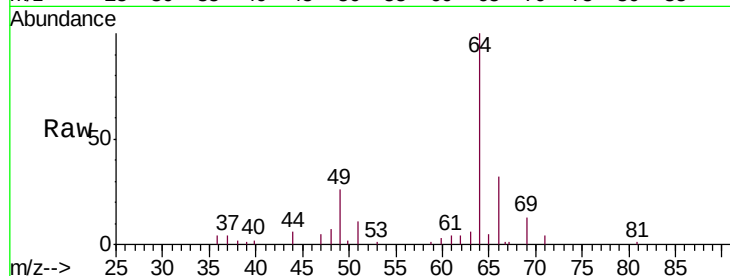
VSTD00552

Tgt Ion: 64 Resp: 28337

Ion Ratio Lower Upper

64 100

66 32.1 20.7 38.5



Abundance Ion 64.10 (63.80 to 64.80): VV010549.D (-142) (-)

Ion 66.05 (65.75 to 66.75): VV010572.D (-62) (-)

25000

20000

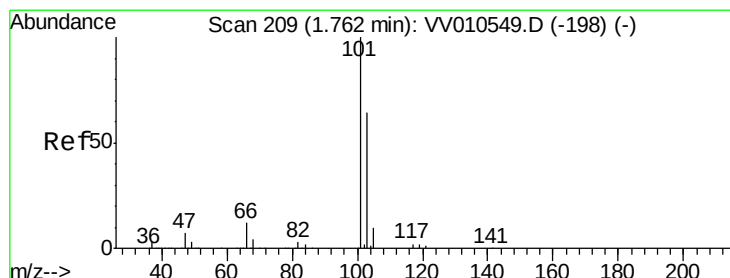
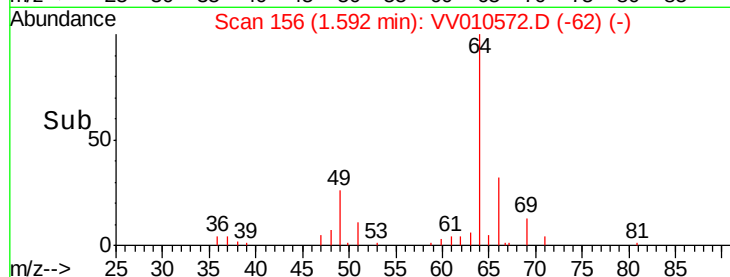
15000

10000

5000

0

Time-->



#9

Trichlorofluoromethane

Concen: 4.864 ug/L

RT: 1.77 min Scan# 210

Delta R.T. 0.00 min

Lab File: VV010572.D

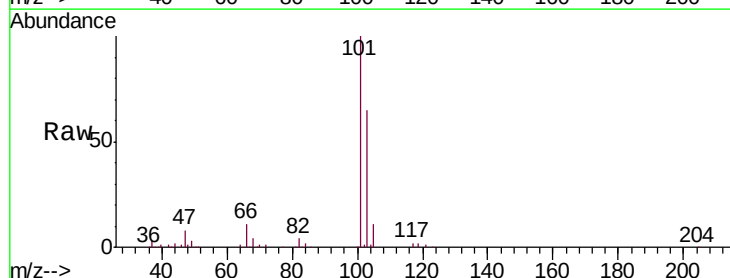
Acq: 30 Apr 2019 02:06

Tgt Ion: 101 Resp: 118669

Ion Ratio Lower Upper

101 100

103 64.8 50.5 75.7



Abundance Ion 101.00 (100.70 to 101.70): VV010549.D (-198) (-)

Ion 103.00 (102.70 to 103.70): VV010572.D (-116) (-)

100000

80000

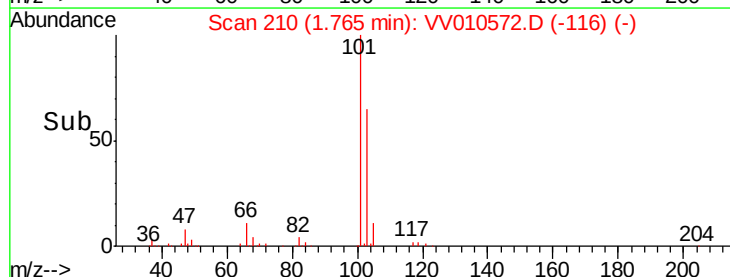
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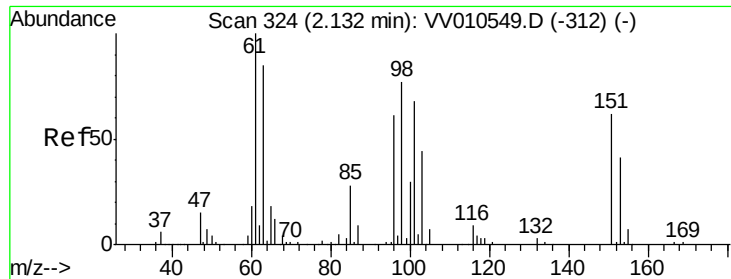
40000

20000

0

Time-->





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 4.363 ug/L

RT: 2.14 min Scan# 325

Delta R.T. 0.00 min

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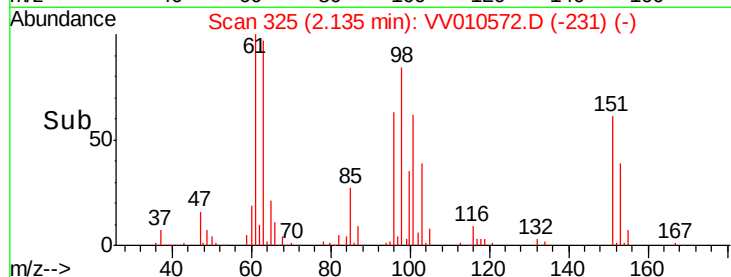
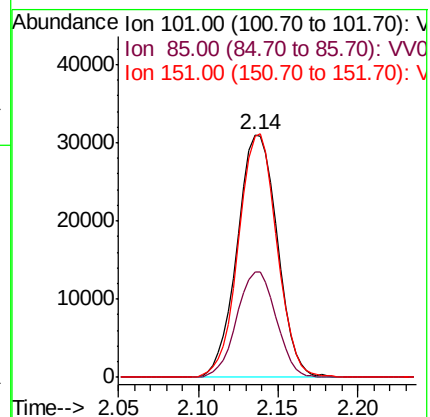
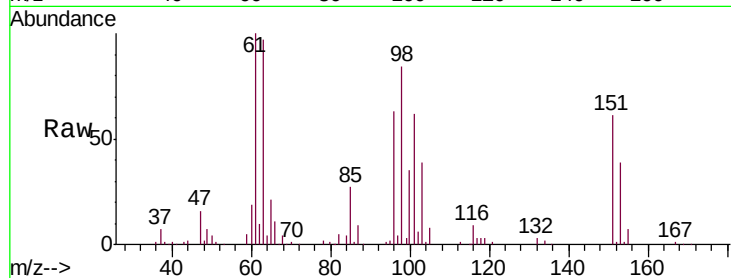
Tgt Ion:101 Resp: 52803

Ion Ratio Lower Upper

101 100

85 42.7 34.2 51.4

151 96.2 75.2 112.8



#12

1,1-Dichloroethene

Concen: 4.405 ug/L

RT: 2.14 min Scan# 326

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

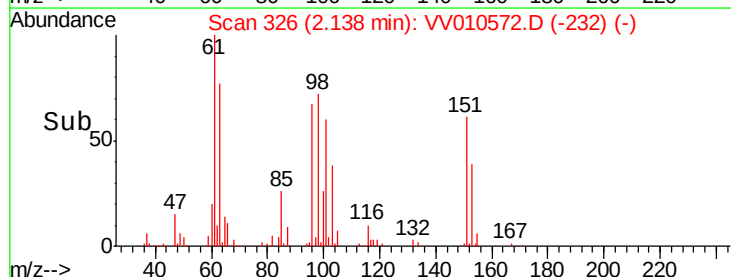
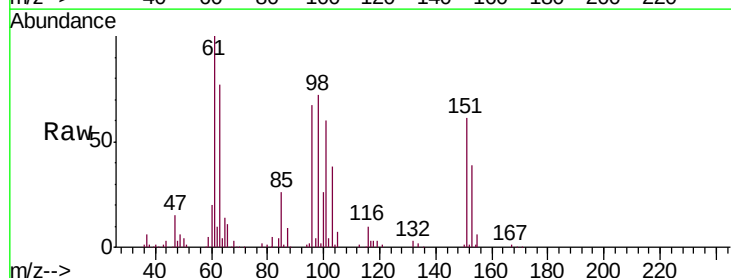
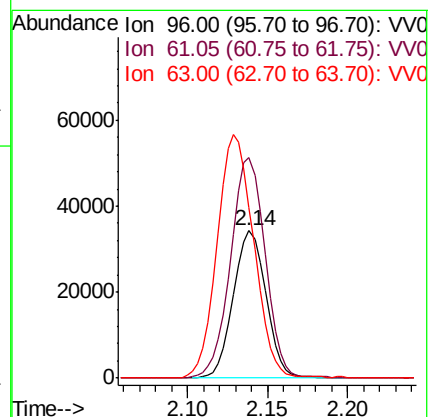
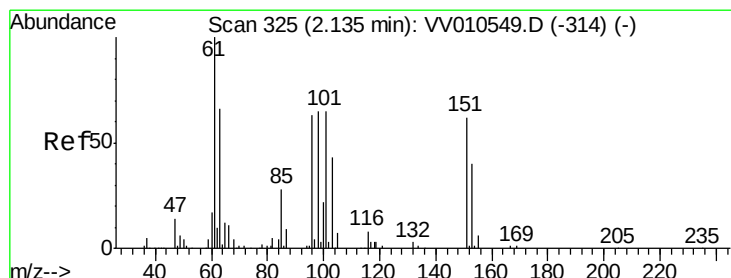
Tgt Ion: 96 Resp: 47552

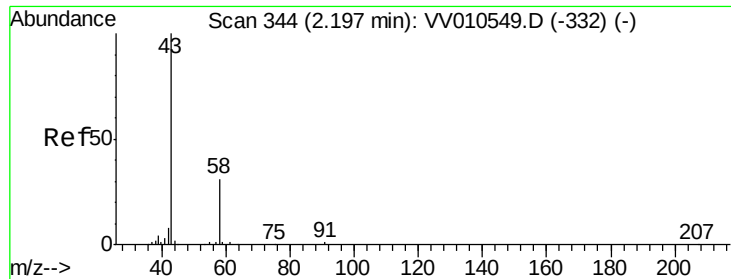
Ion Ratio Lower Upper

96 100

61 149.8 101.2 188.0

63 115.6 79.2 147.0





#13

Acetone

Concen: 37.522 ug/L

RT: 2.20 min Scan# 344

Delta R.T. -0.00 min

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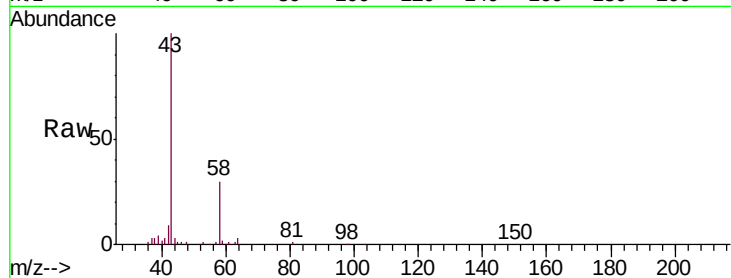
VSTD00552

Tgt Ion: 43 Resp: 52429

Ion Ratio Lower Upper

43 100

58 32.6 0.0 57.4



Abundance Ion 43.05 (42.75 to 43.75): VV010549.D (-332) (-)

Ion 58.05 (57.75 to 58.75): VV010549.D (-332) (-)

2.20

40000

30000

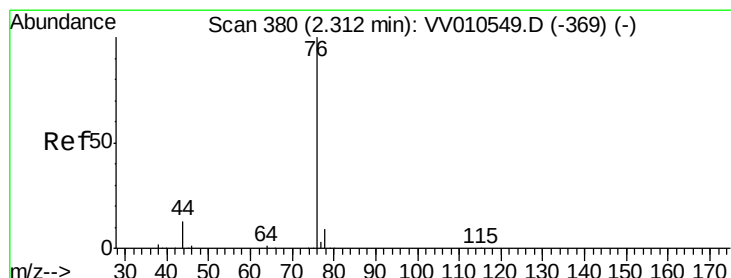
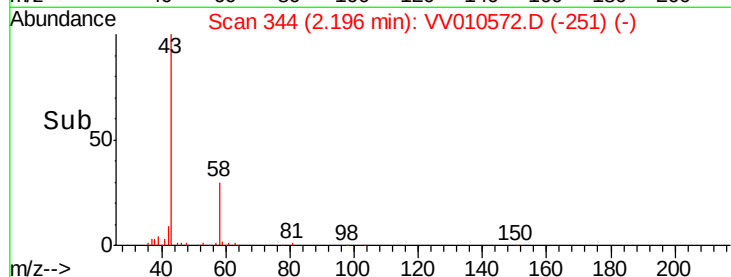
20000

10000

0

Time-->

2.15 2.20 2.25



#14

Carbon disulfide

Concen: 4.194 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.00 min

Lab File: VV010572.D

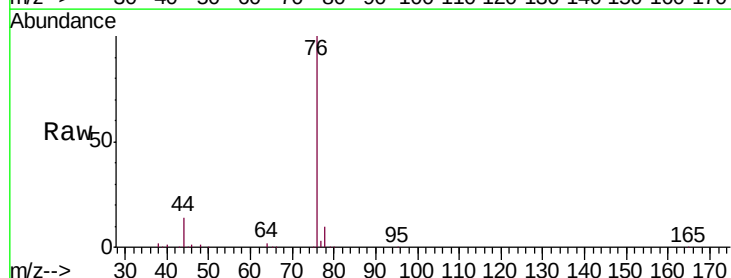
Acq: 30 Apr 2019 02:06

Tgt Ion: 76 Resp: 114296

Ion Ratio Lower Upper

76 100

78 10.3 6.9 10.3



Abundance Ion 76.05 (75.75 to 76.75): VV010549.D (-369) (-)

Ion 78.00 (77.70 to 78.70): VV010549.D (-369) (-)

2.32

80000

60000

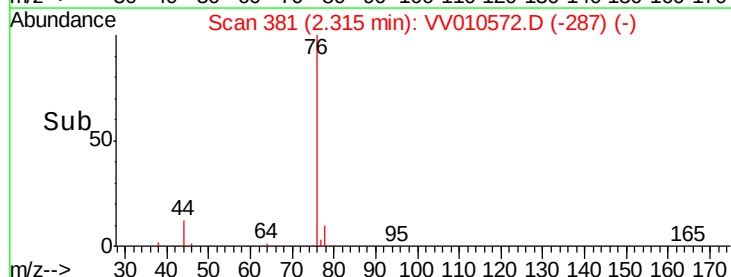
40000

20000

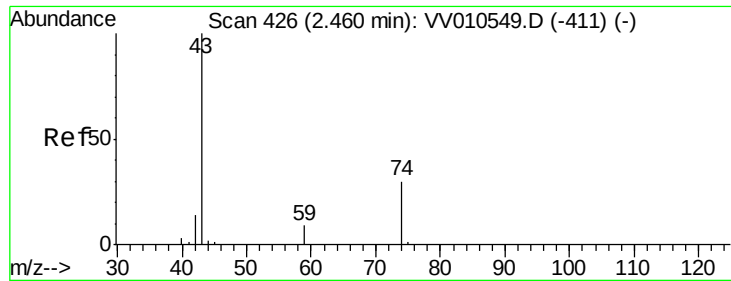
0

Time-->

2.25 2.30 2.35 2.40







#15

Methyl Acetate

Concen: 4.486 ug/L

RT: 2.46 min Scan# 427

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

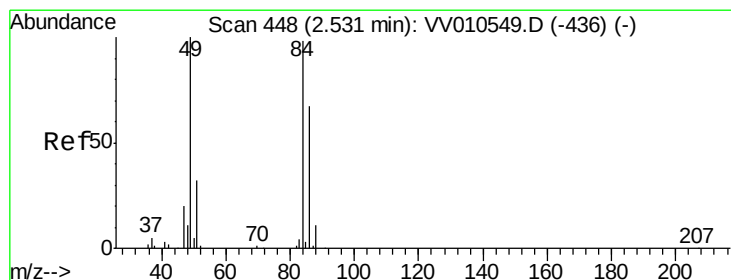
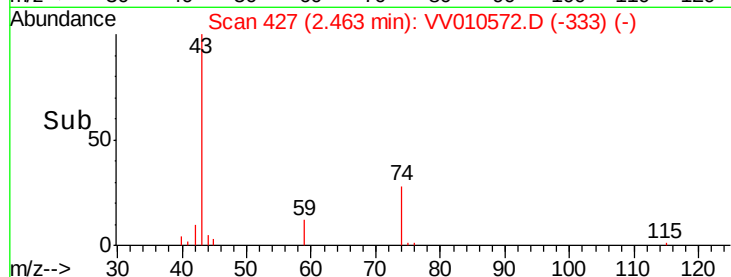
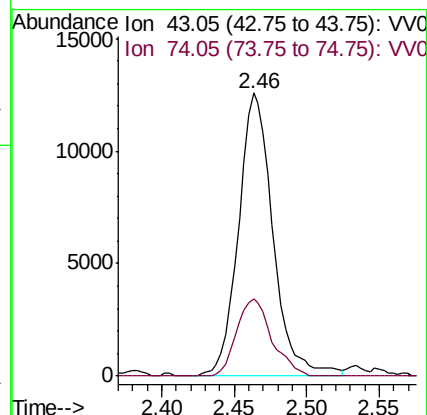
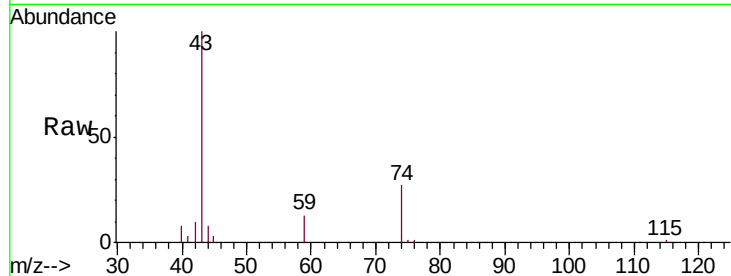
VSTD00552

Tgt Ion: 43 Resp: 20797

Ion Ratio Lower Upper

43 100

74 27.8 24.2 36.2



#16

Methylene chloride

Concen: 4.748 ug/L

RT: 2.53 min Scan# 449

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

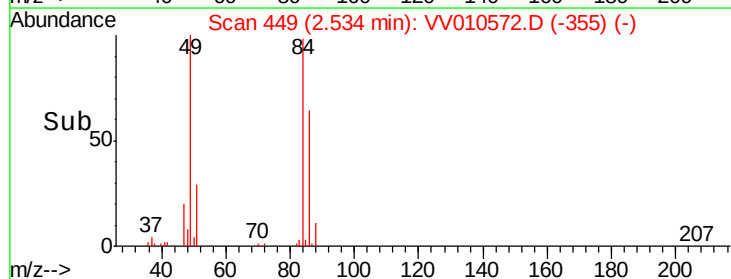
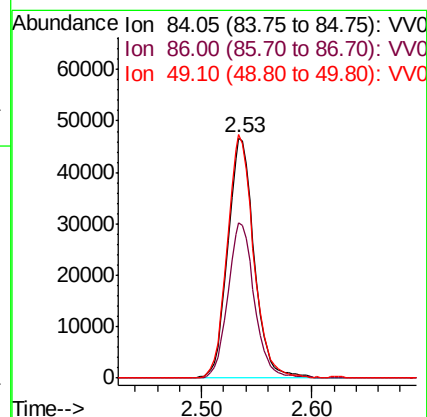
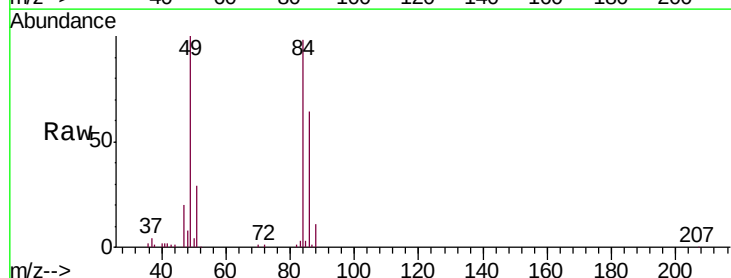
Tgt Ion: 84 Resp: 77523

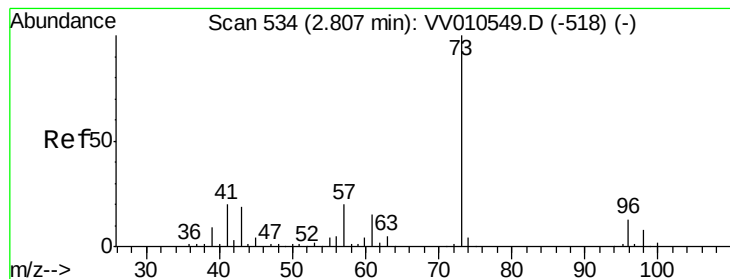
Ion Ratio Lower Upper

84 100

86 65.0 43.7 81.1

49 101.5 71.4 132.6





#17

Methyl tert-butyl Ether

Concen: 4.651 ug/L

RT: 2.81 min Scan# 535

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00552

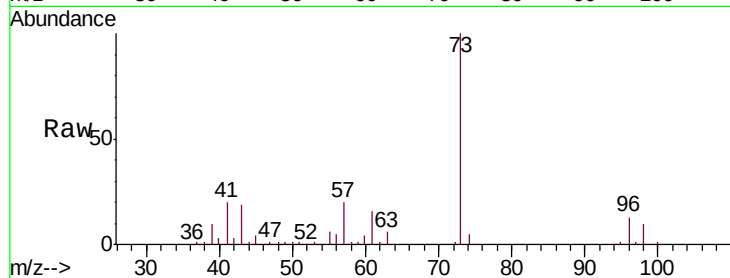
Tgt Ion: 73 Resp: 145390

Ion Ratio Lower Upper

73 100

43 18.8 15.4 23.0

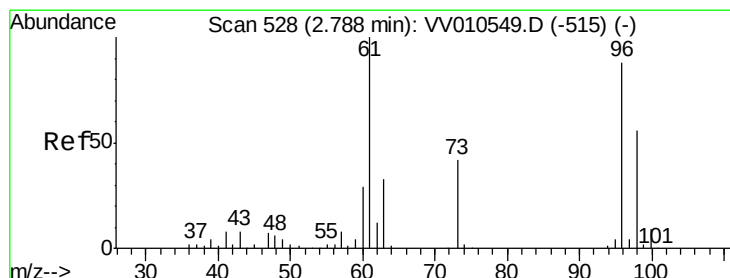
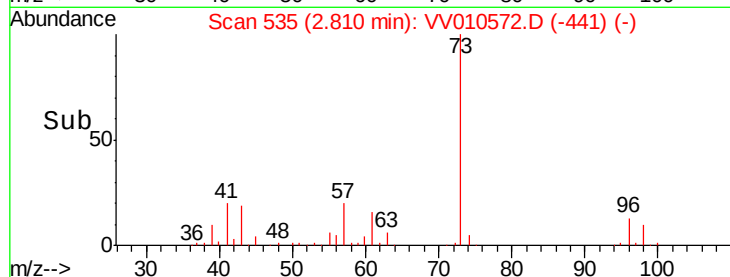
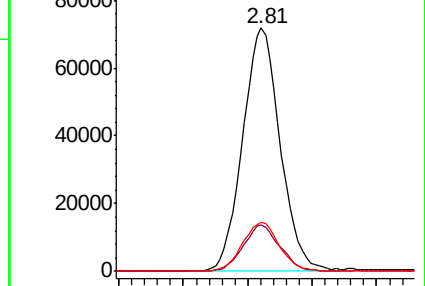
57 19.8 16.0 24.0



Abundance Ion 73.10 (72.80 to 73.80): VV010549.D (-518) (-)

Ion 43.05 (42.75 to 43.75): VV010549.D (-518) (-)

Ion 57.10 (56.80 to 57.80): VV010549.D (-518) (-)



#18

trans-1,2-Dichloroethene

Concen: 4.894 ug/L

RT: 2.79 min Scan# 529

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

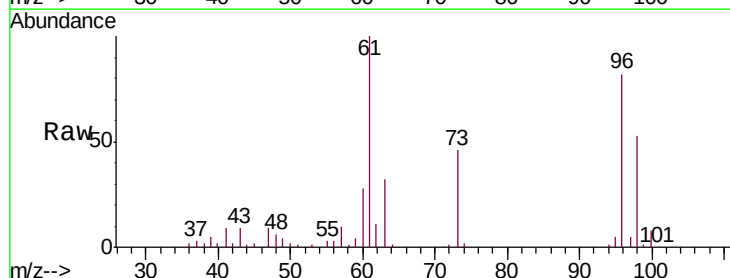
Tgt Ion: 96 Resp: 75484

Ion Ratio Lower Upper

96 100

61 121.7 80.2 148.9

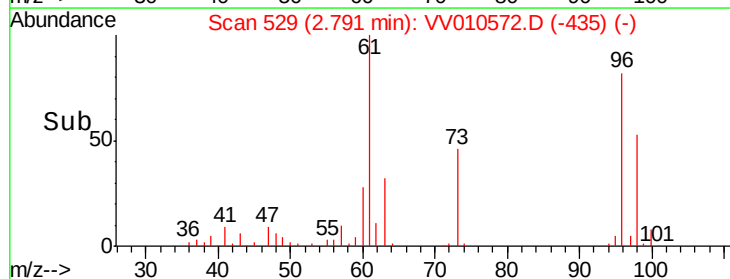
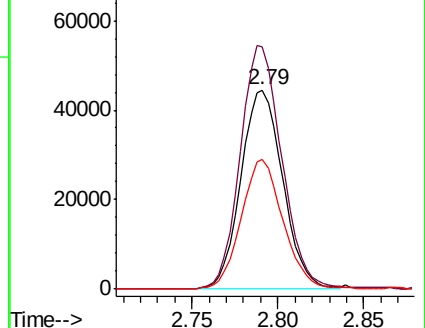
98 65.0 43.3 80.3

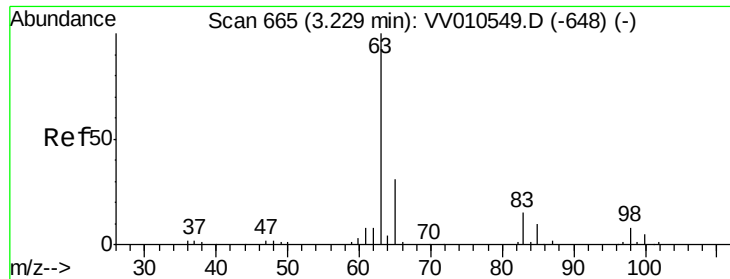


Abundance Ion 96.00 (95.70 to 96.70): VV010549.D (-515) (-)

Ion 61.05 (60.75 to 61.75): VV010549.D (-515) (-)

Ion 97.95 (97.65 to 98.65): VV010549.D (-515) (-)

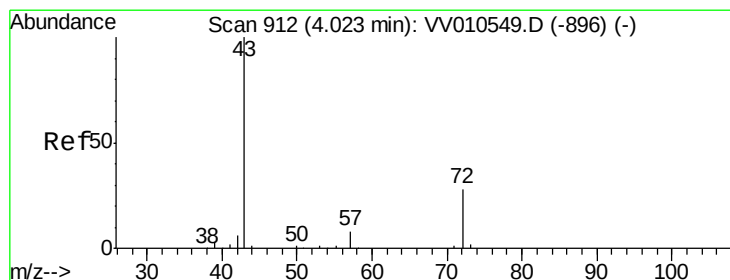
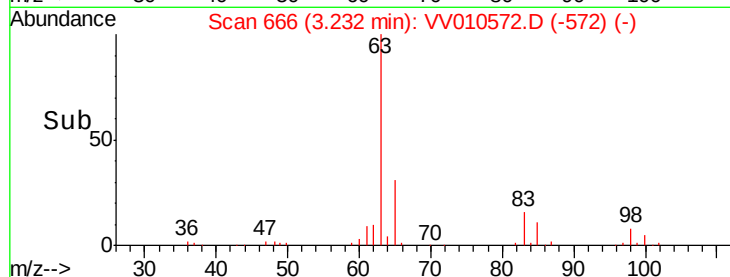
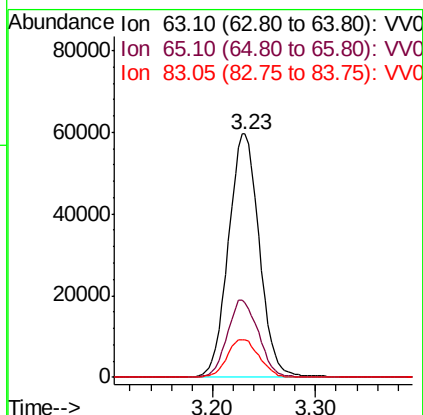
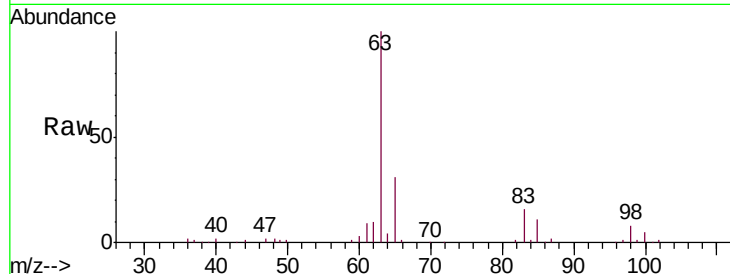




#19  
 1,1-Dichloroethane  
 Concen: 4.899 ug/L  
 RT: 3.23 min Scan# 666  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

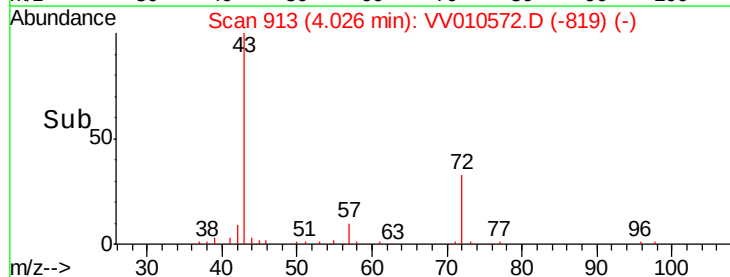
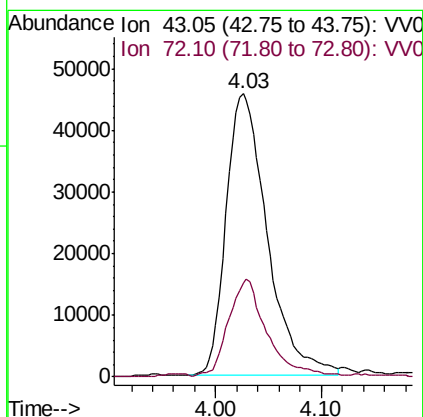
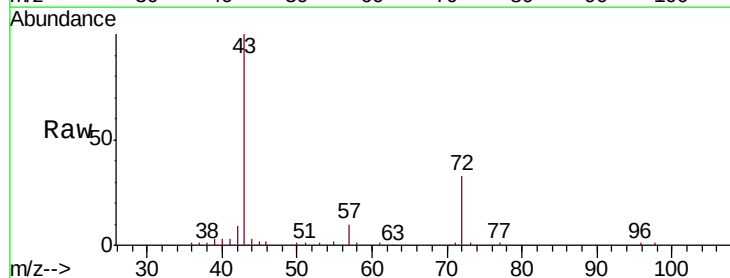
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00552

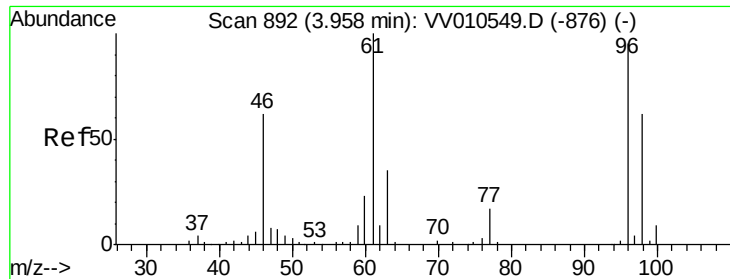
Tgt Ion: 63 Resp: 124581  
 Ion Ratio Lower Upper  
 63 100  
 65 30.6 22.6 42.0  
 83 15.5 9.8 18.2



#21  
 2-Butanone  
 Concen: 42.864 ug/L  
 RT: 4.03 min Scan# 913  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Tgt Ion: 43 Resp: 123790  
 Ion Ratio Lower Upper  
 43 100  
 72 31.7 14.6 43.8



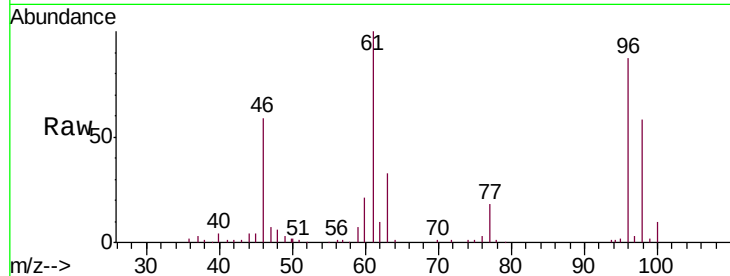


#22

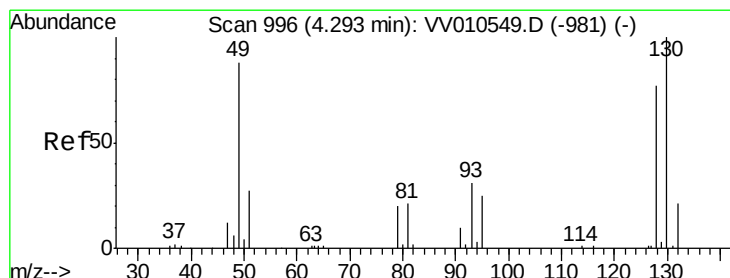
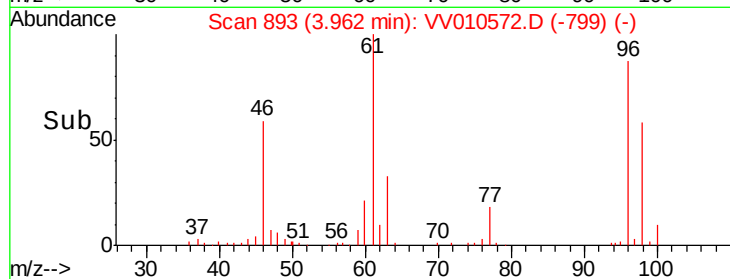
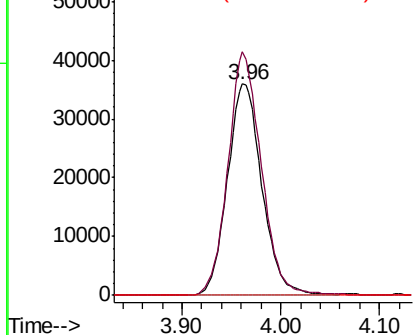
cis-1,2-Dichloroethene  
 Concen: 5.262 ug/L  
 RT: 3.96 min Scan# 893  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD00552

Tgt Ion: 96 Resp: 87611  
 Ion Ratio Lower Upper  
 96 100  
 61 115.2 79.9 148.3  
 68 0.0 0.0 0.0



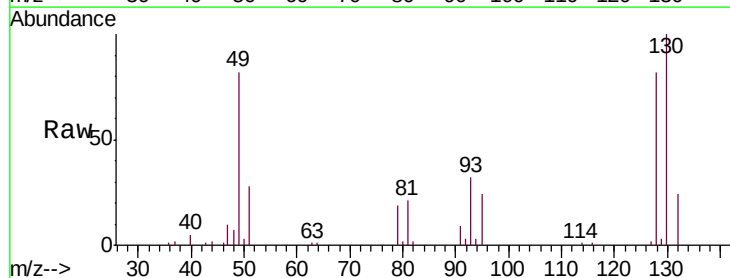
Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0  
 Ion 68.15 (67.85 to 68.85): VV0



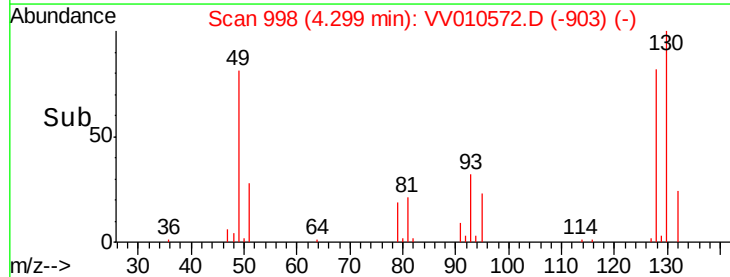
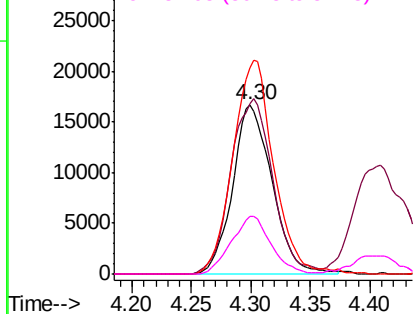
#23

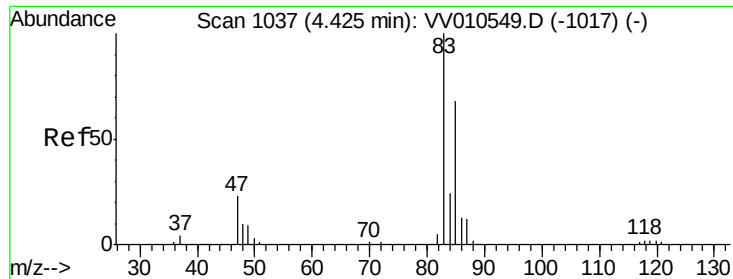
Bromochloromethane  
 Concen: 4.926 ug/L  
 RT: 4.30 min Scan# 998  
 Delta R.T. 0.01 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Tgt Ion: 128 Resp: 38336  
 Ion Ratio Lower Upper  
 128 100  
 49 100.3 82.3 152.9  
 130 121.7 89.8 166.8  
 51 33.9 29.0 43.6



Abundance Ion 127.90 (127.60 to 128.60): V  
 Ion 49.10 (48.80 to 49.80): VV0  
 Ion 129.95 (129.65 to 130.65): V  
 Ion 51.05 (50.75 to 51.75): VV0

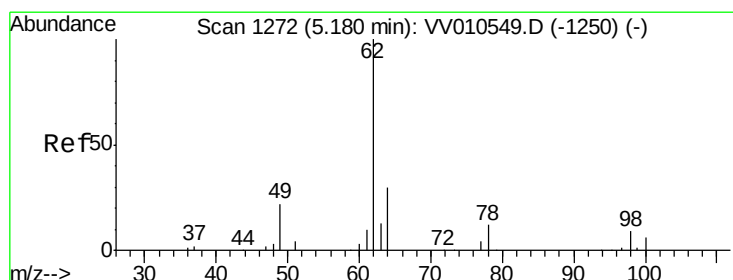
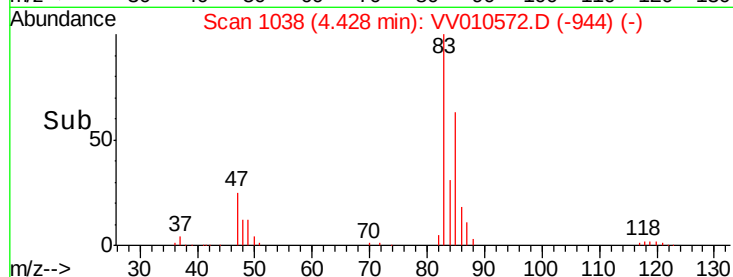
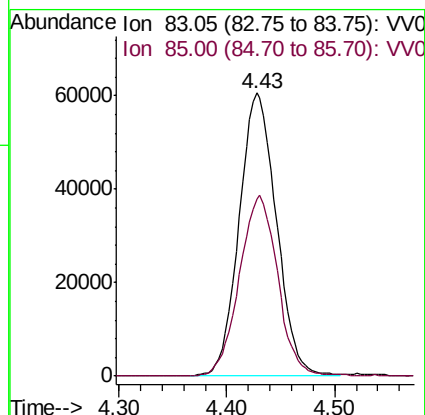
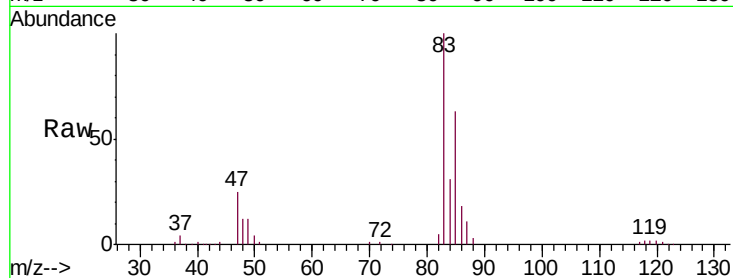




#25  
Chloroform  
Concen: 5.048 ug/L  
RT: 4.43 min Scan# 1038  
Delta R.T. 0.00 min  
Lab File: VV010572.D  
Acq: 30 Apr 2019 02:06

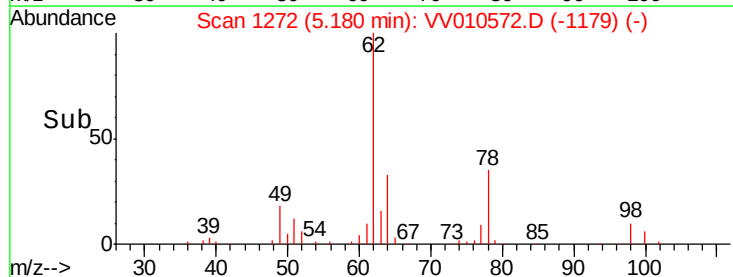
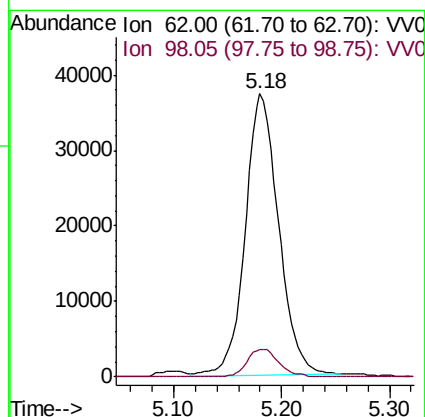
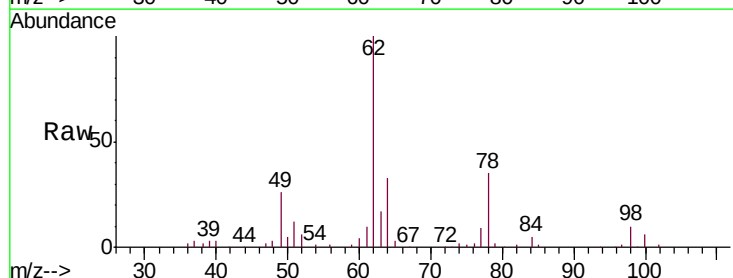
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00552

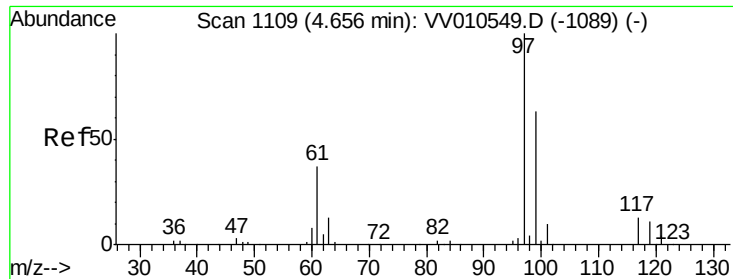
Tgt Ion: 83 Resp: 145628  
Ion Ratio Lower Upper  
83 100  
85 62.6 43.6 81.0



#27  
1,2-Dichloroethane  
Concen: 4.891 ug/L  
RT: 5.18 min Scan# 1272  
Delta R.T. -0.00 min  
Lab File: VV010572.D  
Acq: 30 Apr 2019 02:06

Tgt Ion: 62 Resp: 80344  
Ion Ratio Lower Upper  
62 100  
98 9.7 7.6 11.4

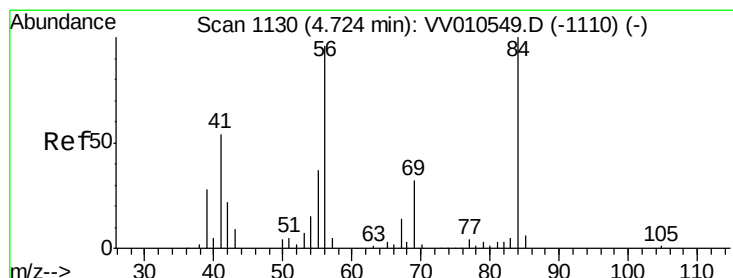
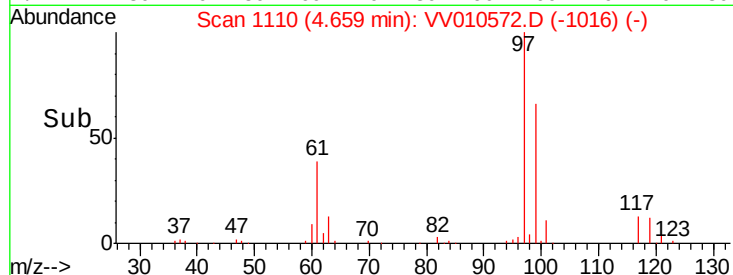
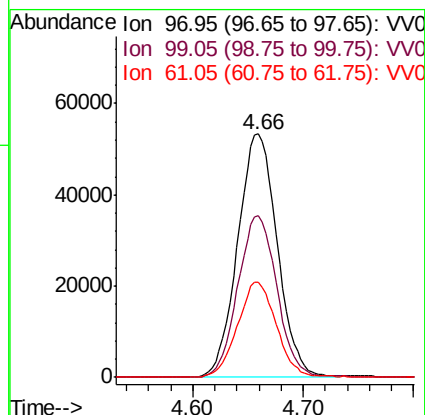
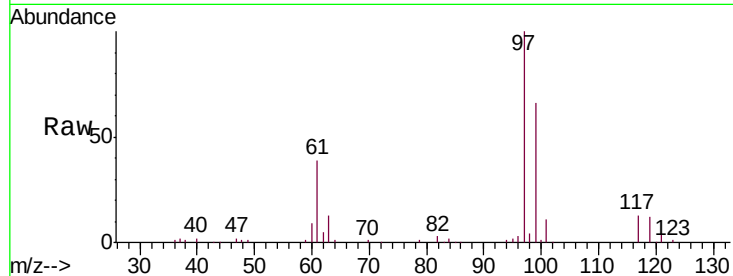




#29  
 1,1,1-Trichloroethane  
 Concen: 5.301 ug/L  
 RT: 4.66 min Scan# 1110  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

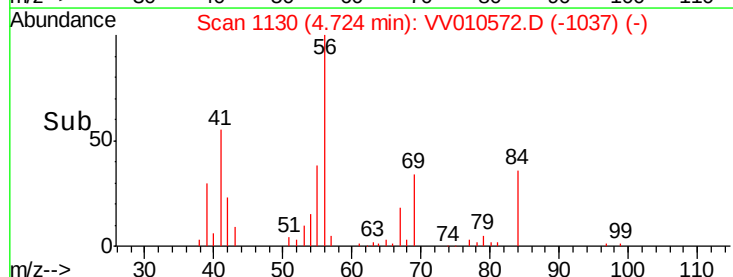
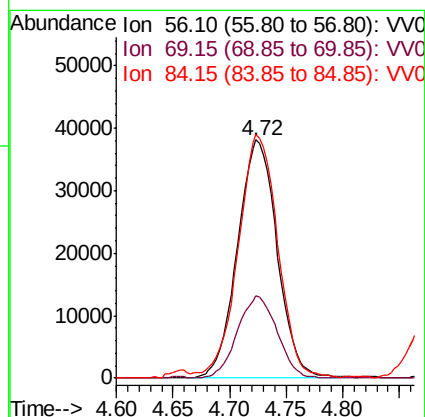
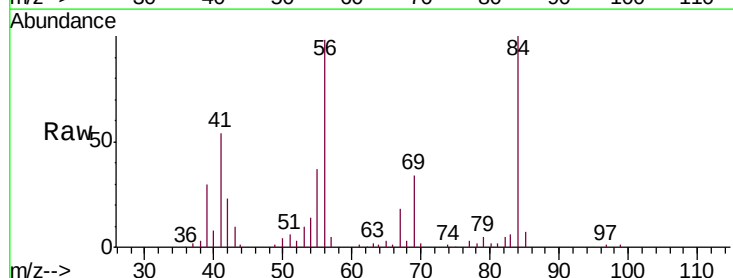
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00552

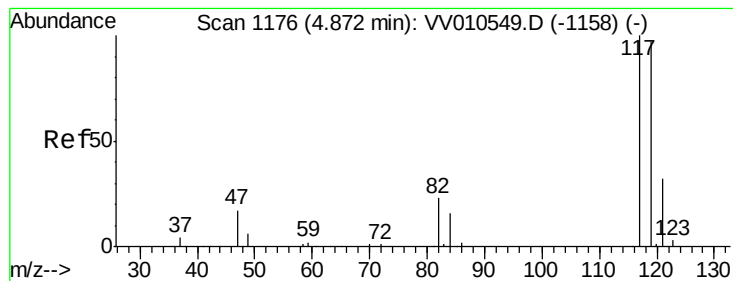
Tgt Ion: 97 Resp: 132896  
 Ion Ratio Lower Upper  
 97 100  
 99 65.2 51.8 77.6  
 61 38.3 31.6 47.4



#30  
 Cyclohexane  
 Concen: 5.131 ug/L  
 RT: 4.72 min Scan# 1130  
 Delta R.T. -0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Tgt Ion: 56 Resp: 93230  
 Ion Ratio Lower Upper  
 56 100  
 69 34.3 27.1 40.7  
 84 101.2 80.4 120.6





#31

Carbon tetrachloride

Concen: 5.378 ug/L

RT: 4.88 min Scan# 1178

Delta R.T. 0.01 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

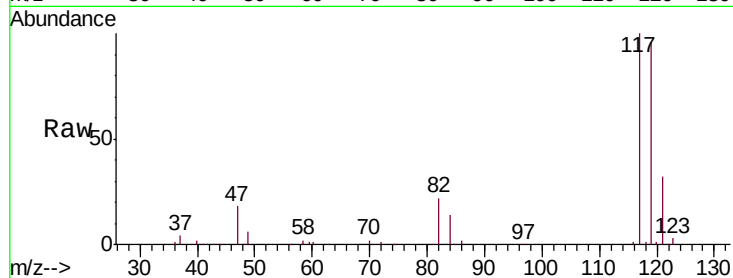
VSTD00552

Tgt Ion:117 Resp: 128943

Ion Ratio Lower Upper

117 100

119 94.8 77.8 116.6



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 118.90 (118.60 to 119.60): V

4.88

60000

50000

40000

30000

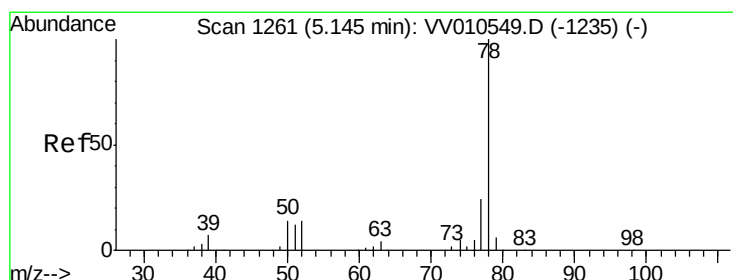
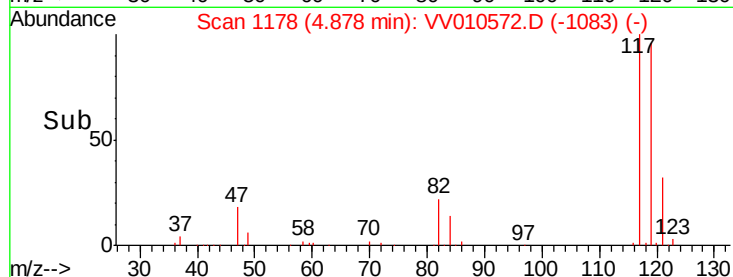
20000

10000

0

4.80 4.90 5.00

Time-->



#33

Benzene

Concen: 5.207 ug/L

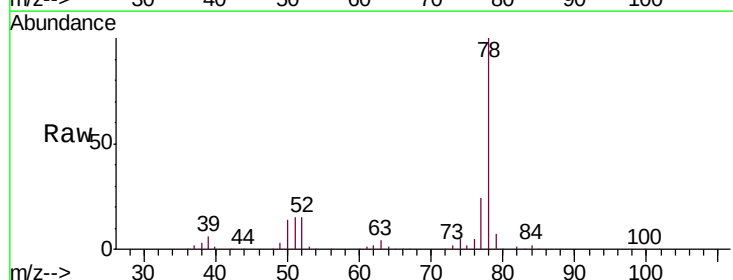
RT: 5.15 min Scan# 1262

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Tgt Ion: 78 Resp: 288381



Abundance Ion 78.10 (77.80 to 78.80): VV0

150000

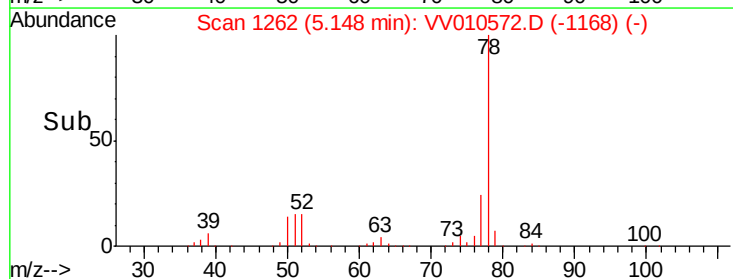
100000

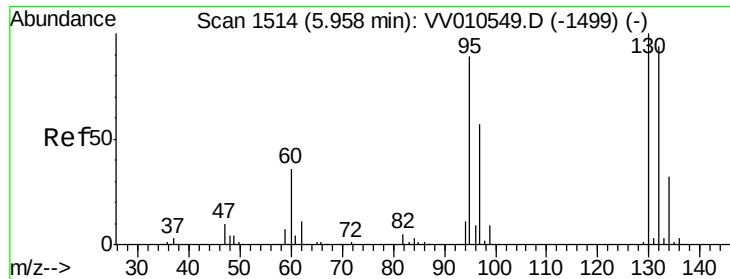
50000

0

5.00 5.10 5.20

Time-->

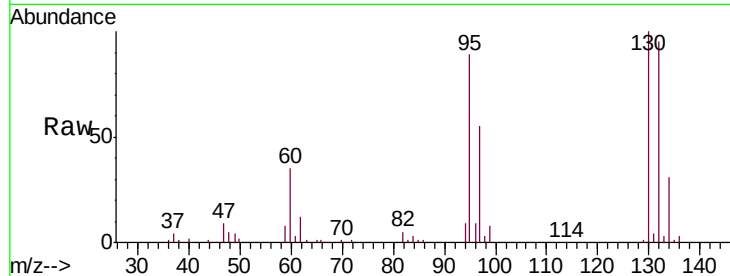




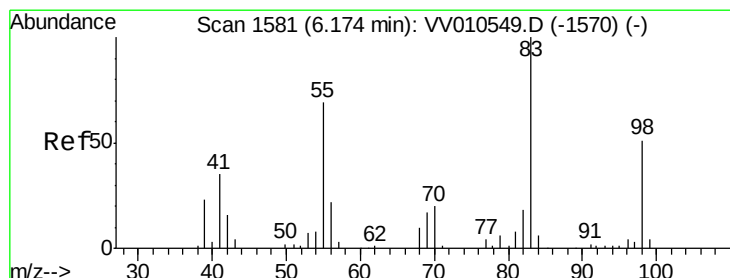
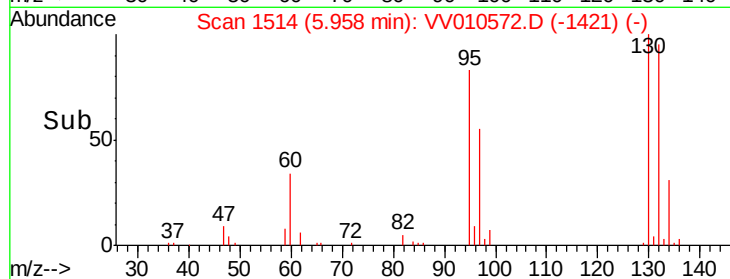
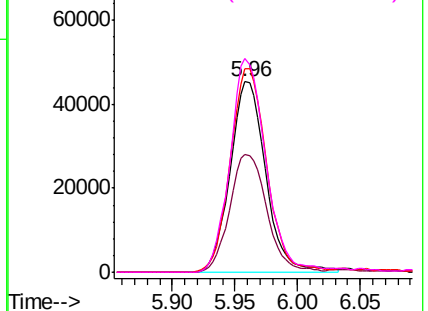
#34  
 Trichloroethene  
 Concen: 5.573 ug/L  
 RT: 5.96 min Scan# 1514  
 Delta R.T. -0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00552

Tgt Ion: 95 Resp: 89840  
 Ion Ratio Lower Upper  
 95 100  
 97 62.1 43.3 80.5  
 132 107.0 74.1 137.5  
 130 112.3 79.5 147.6

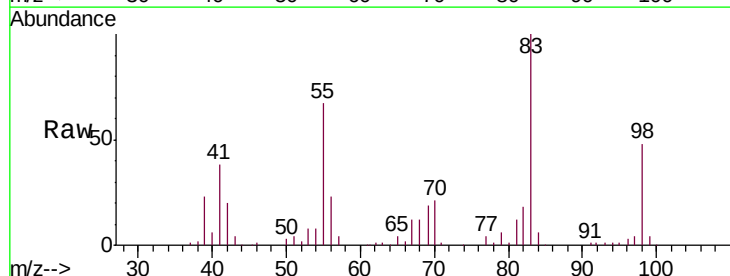


Abundance Ion 95.00 (94.70 to 95.70): VV0  
 Ion 96.95 (96.65 to 97.65): VV0  
 Ion 131.95 (131.65 to 132.65): V  
 Ion 129.95 (129.65 to 130.65): V

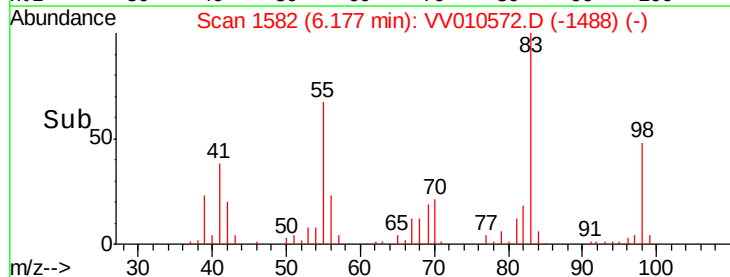
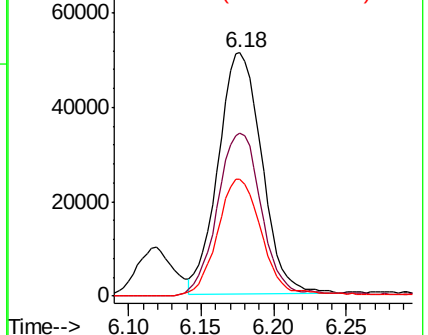


#35  
 Methylcyclohexane  
 Concen: 5.108 ug/L  
 RT: 6.18 min Scan# 1582  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

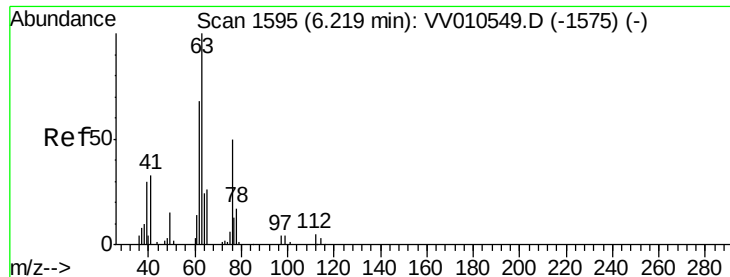
Tgt Ion: 83 Resp: 106864  
 Ion Ratio Lower Upper  
 83 100  
 55 68.9 58.0 87.0  
 98 49.7 40.4 60.6



Abundance Ion 83.15 (82.85 to 83.85): VV0  
 Ion 55.10 (54.80 to 55.80): VV0  
 Ion 98.15 (97.85 to 98.85): VV0



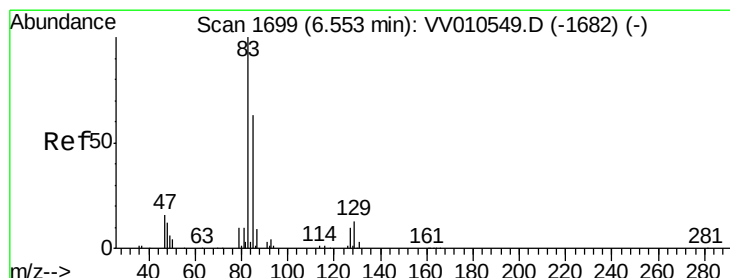
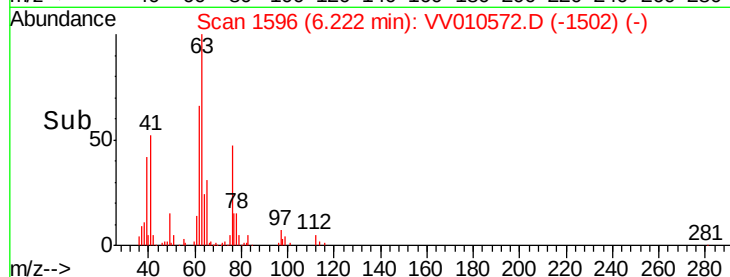
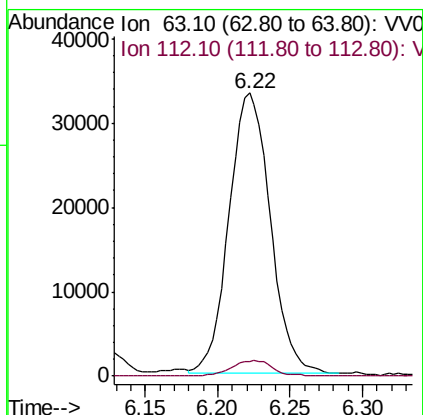
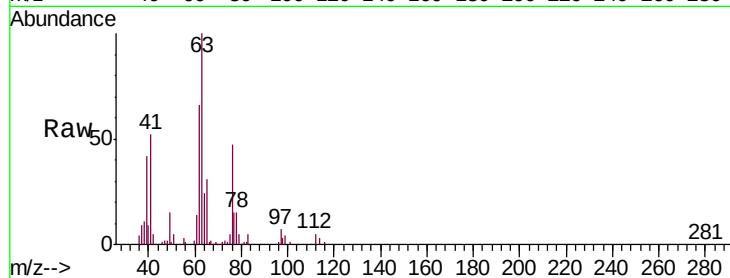




#37  
 1,2-Dichloropropane  
 Concen: 5.140 ug/L  
 RT: 6.22 min Scan# 1596  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

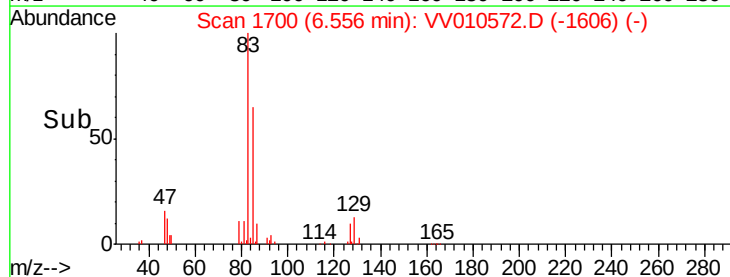
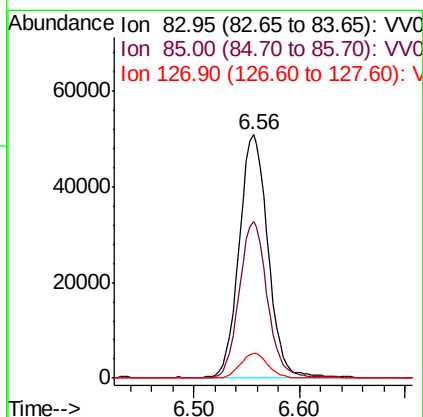
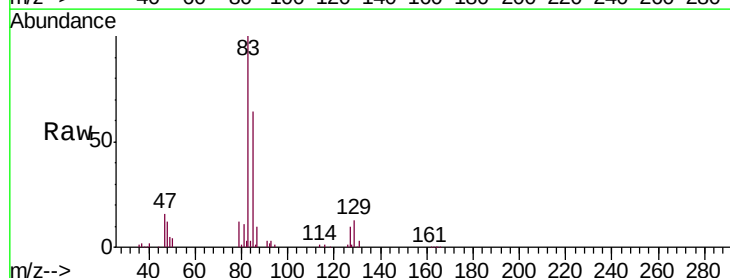
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00552

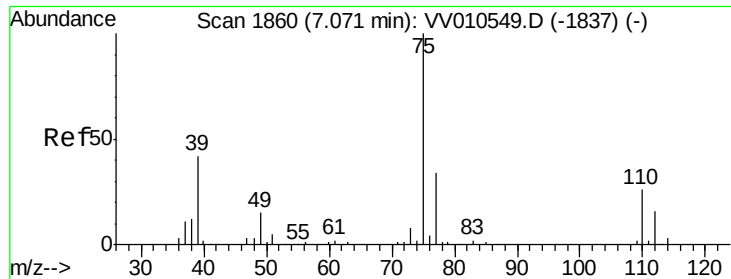
Tgt Ion: 63 Resp: 65634  
 Ion Ratio Lower Upper  
 63 100  
 112 5.6 3.7 5.5#



#38  
 Bromodichloromethane  
 Concen: 5.286 ug/L  
 RT: 6.56 min Scan# 1700  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Tgt Ion: 83 Resp: 96909  
 Ion Ratio Lower Upper  
 83 100  
 85 64.2 47.5 88.1  
 127 10.3 8.2 12.4

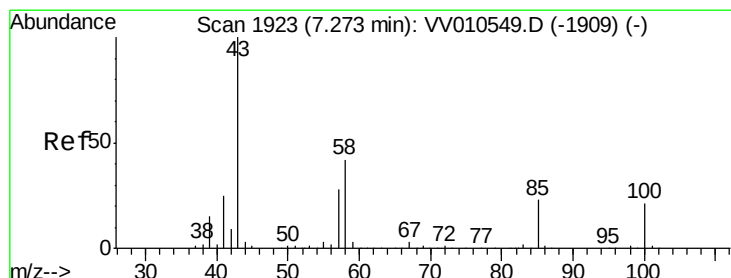
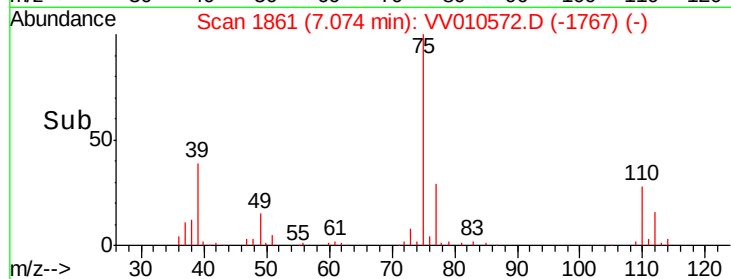
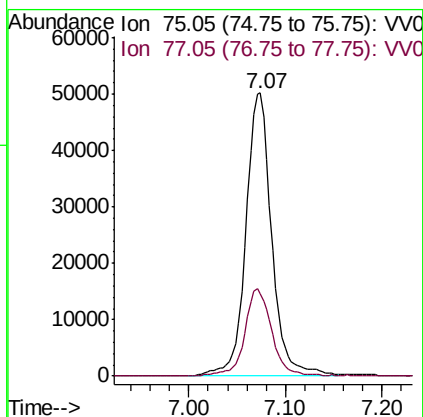
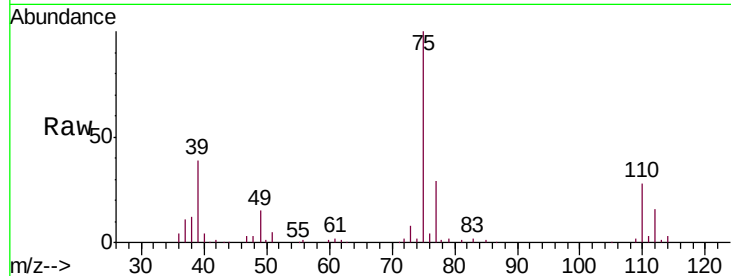




#39  
 cis-1,3-Dichloropropene  
 Concen: 5.062 ug/L  
 RT: 7.07 min Scan# 1861  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

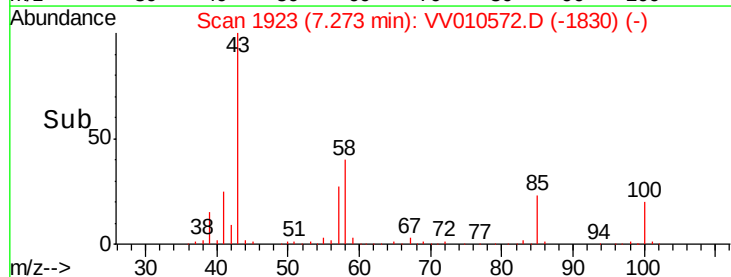
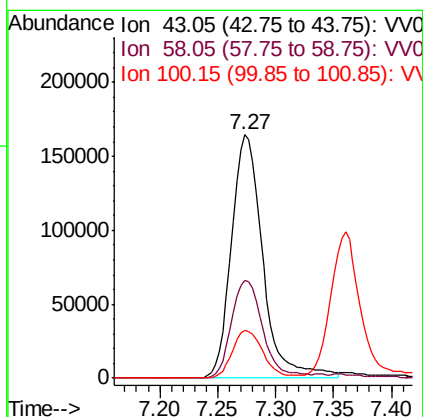
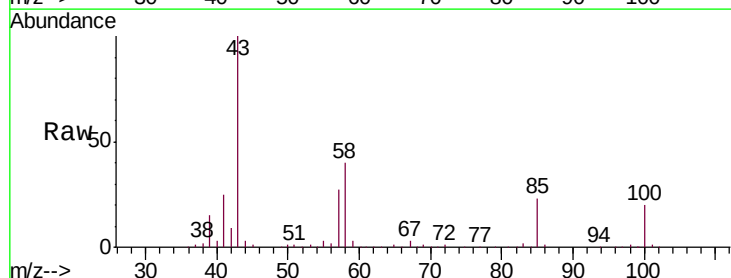
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00552

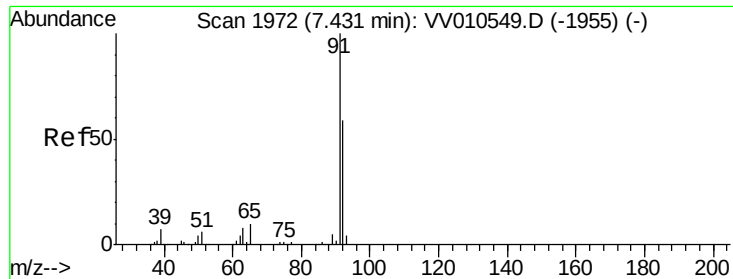
Tgt Ion: 75 Resp: 93330  
 Ion Ratio Lower Upper  
 75 100  
 77 29.1 21.6 40.0



#40  
 4-Methyl-2-pentanone  
 Concen: 45.720 ug/L  
 RT: 7.27 min Scan# 1923  
 Delta R.T. -0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Tgt Ion: 43 Resp: 309603  
 Ion Ratio Lower Upper  
 43 100  
 58 40.2 31.9 47.9  
 100 19.4 15.0 22.4





#42

Toluene

Concen: 5.364 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

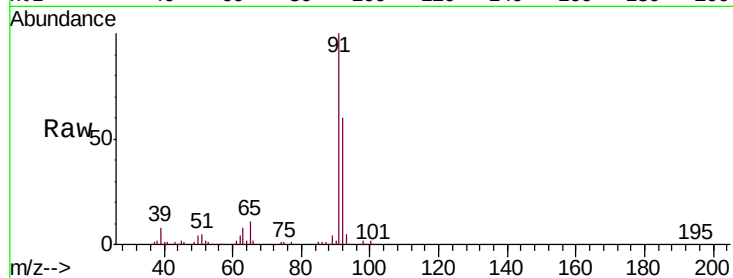
VSTD00552

Tgt Ion: 91 Resp: 326059

Ion Ratio Lower Upper

91 100

92 59.5 41.1 76.3



Abundance Ion 91.15 (90.85 to 91.85): VV010549.D (-1955) (-)

Ion 92.15 (91.85 to 92.85): VV010549.D (-1955) (-)

7.43

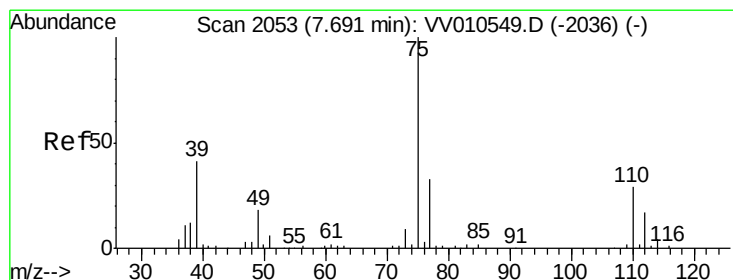
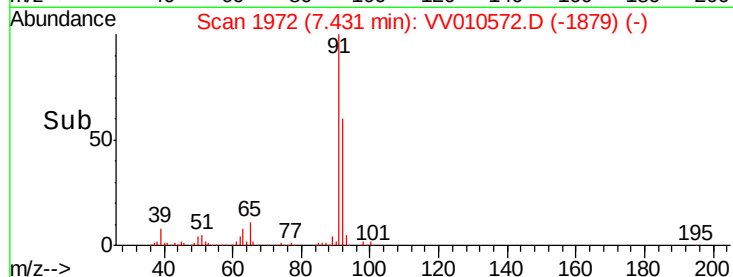
150000

100000

50000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 5.110 ug/L

RT: 7.69 min Scan# 2054

Delta R.T. 0.00 min

Lab File: VV010572.D

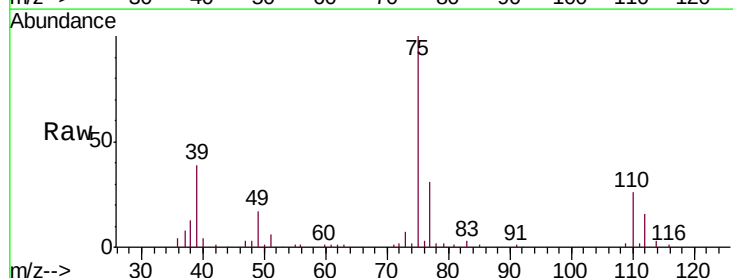
Acq: 30 Apr 2019 02:06

Tgt Ion: 75 Resp: 74069

Ion Ratio Lower Upper

75 100

77 31.1 23.0 42.6



Abundance Ion 75.05 (74.75 to 75.75): VV010549.D (-2036) (-)

Ion 77.05 (76.75 to 77.75): VV010549.D (-2036) (-)

7.69

50000

40000

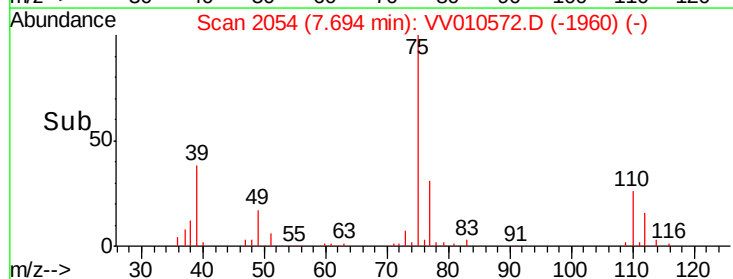
30000

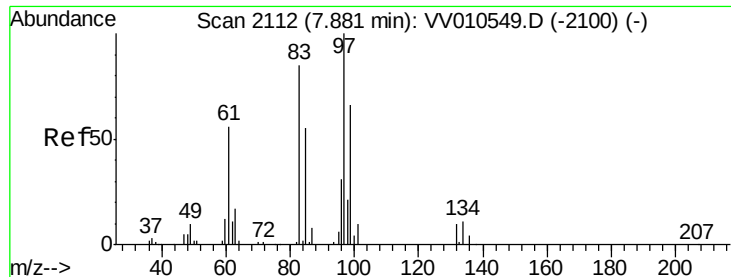
20000

10000

0

Time-->





#45

1,1,2-Trichloroethane

Concen: 4.949 ug/L

RT: 7.88 min Scan# 2113

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00552

Tgt Ion: 97 Resp: 53574

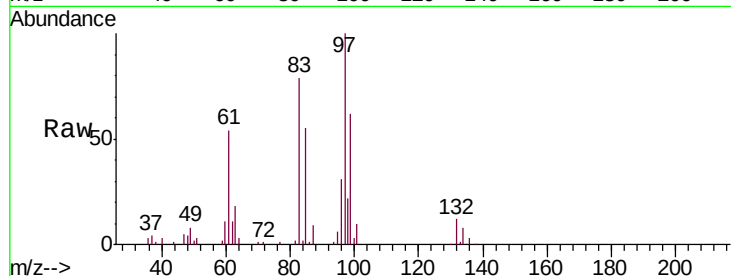
Ion Ratio Lower Upper

97 100

99 62.2 39.5 73.4

83 79.1 57.7 107.3

85 55.4 32.8 61.0

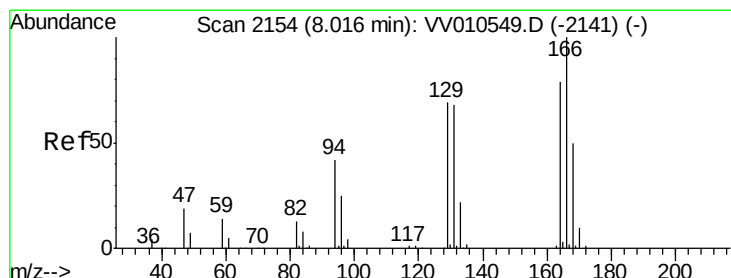
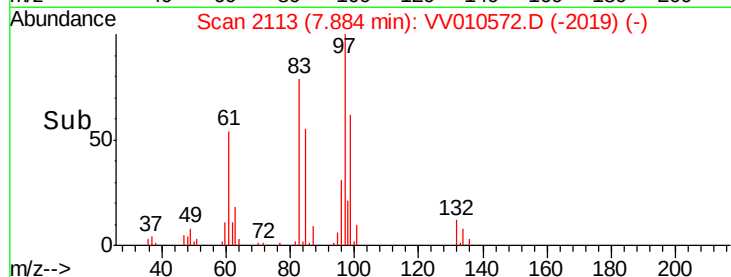
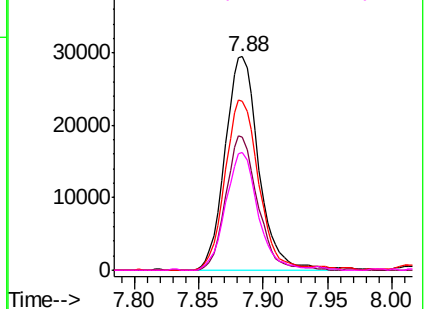


Abundance Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0



#47

Tetrachloroethene

Concen: 5.179 ug/L

RT: 8.02 min Scan# 2154

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Tgt Ion: 164 Resp: 77986

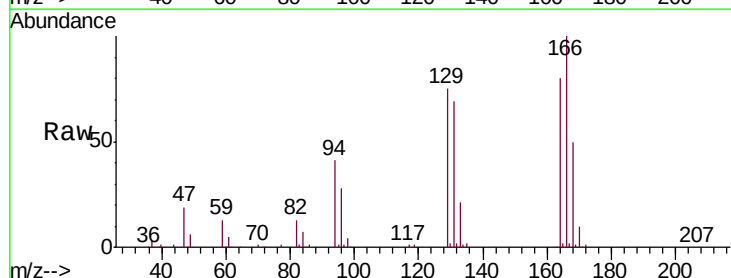
Ion Ratio Lower Upper

164 100

129 93.6 62.2 115.4

131 86.2 61.5 114.1

166 124.8 89.1 165.5

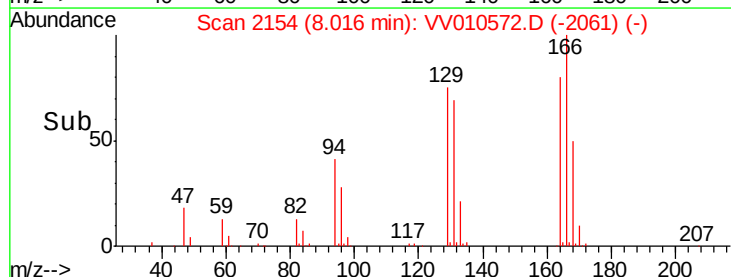
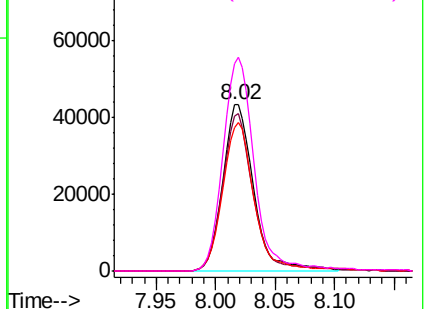


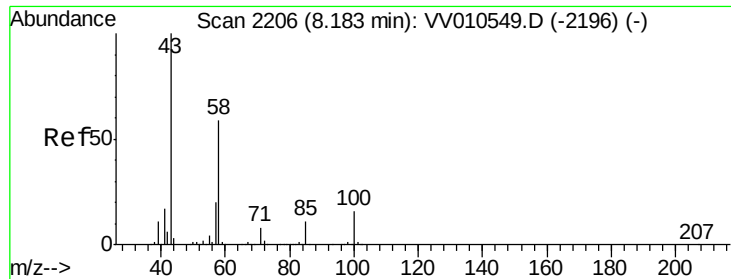
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V

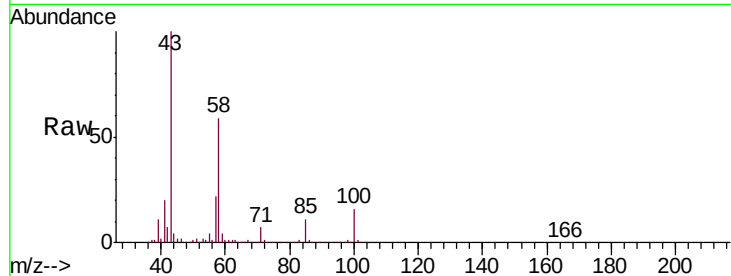




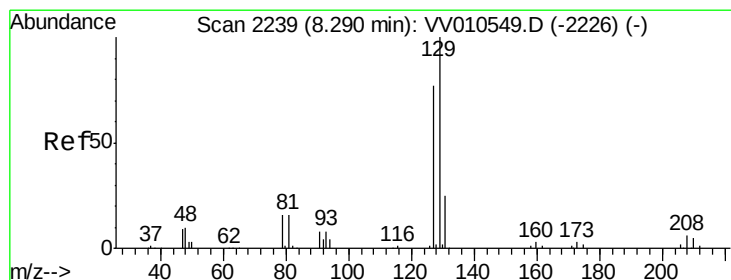
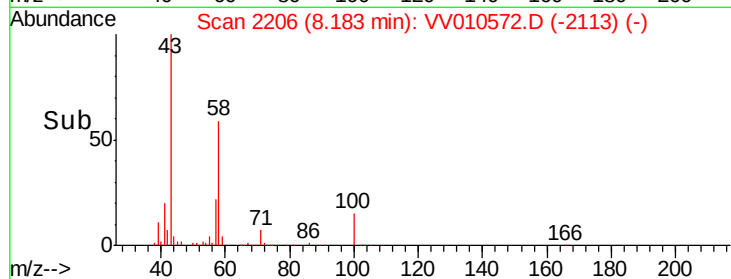
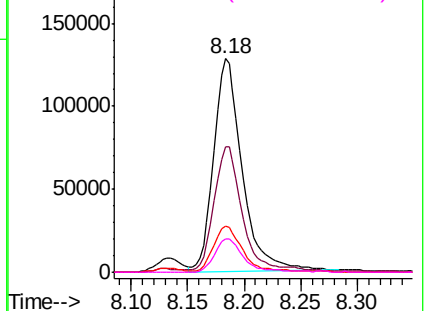
#48  
2-Hexanone  
Concen: 47.391 ug/L  
RT: 8.18 min Scan# 2206  
Delta R.T. -0.00 min  
Lab File: VV010572.D  
Acq: 30 Apr 2019 02:06

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00552

Tgt Ion: 43 Resp: 223910  
Ion Ratio Lower Upper  
43 100  
58 57.4 43.1 64.7  
57 21.3 16.3 24.5  
100 16.0 11.8 17.8

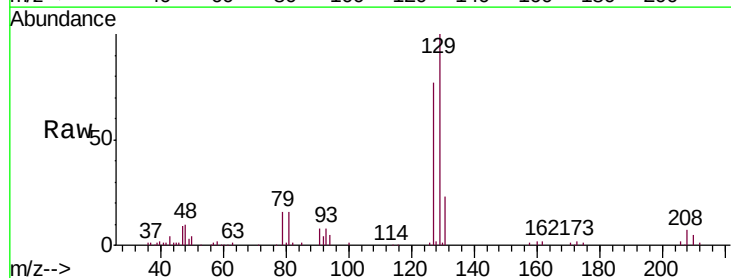


Abundance Ion 43.05 (42.75 to 43.75): VV0  
Ion 58.05 (57.75 to 58.75): VV0  
Ion 57.20 (56.90 to 57.90): VV0  
Ion 100.15 (99.85 to 100.85): VV0

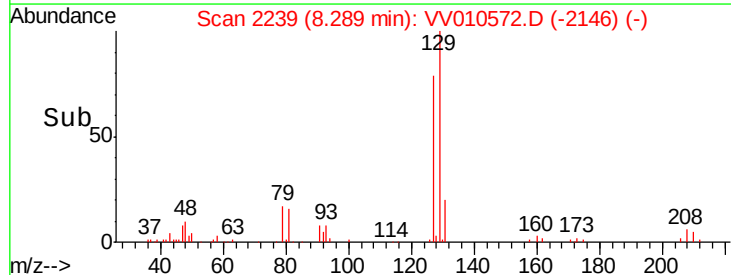
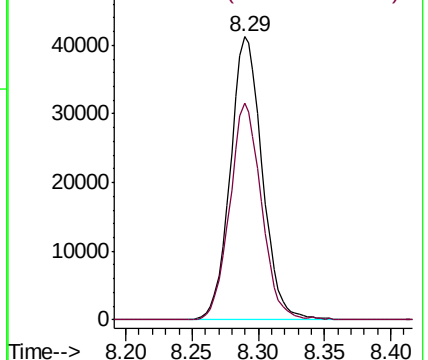


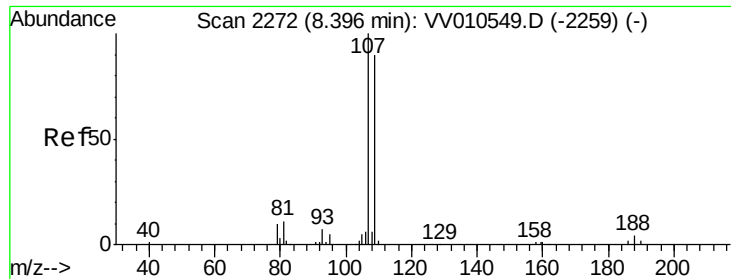
#49  
Dibromochloromethane  
Concen: 5.184 ug/L  
RT: 8.29 min Scan# 2239  
Delta R.T. -0.00 min  
Lab File: VV010572.D  
Acq: 30 Apr 2019 02:06

Tgt Ion: 129 Resp: 68998  
Ion Ratio Lower Upper  
129 100  
127 76.6 51.9 96.5



Abundance Ion 128.95 (128.65 to 129.65): V  
Ion 126.90 (126.60 to 127.60): V

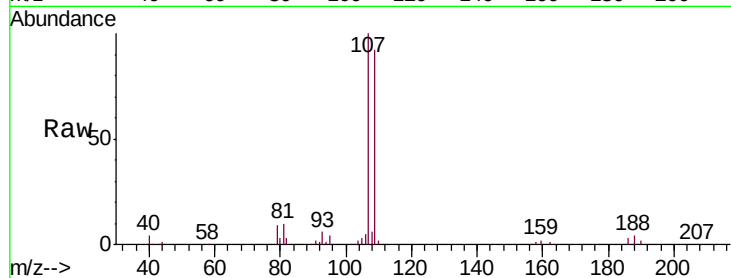




#50  
1,2-Dibromoethane  
Concen: 5.047 ug/L  
RT: 8.40 min Scan# 2273  
Delta R.T. 0.00 min  
Lab File: VV010572.D  
Acq: 30 Apr 2019 02:06

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD00552

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 92.1  | 65.5  | 121.6 |
| 188     | 4.1   | 3.6   | 5.4   |

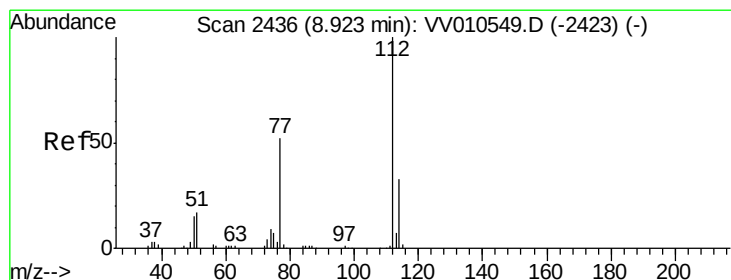
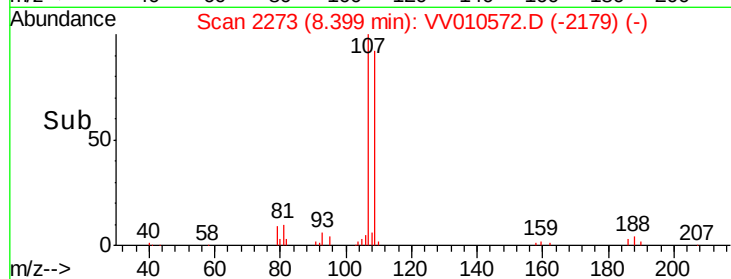
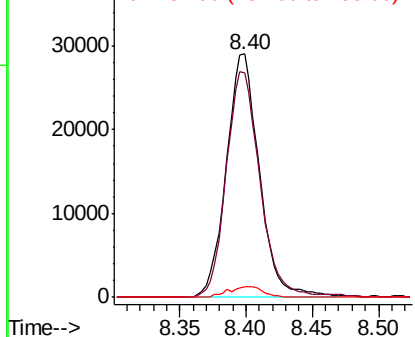


Abundance

Ion 106.95 (106.65 to 107.65): V

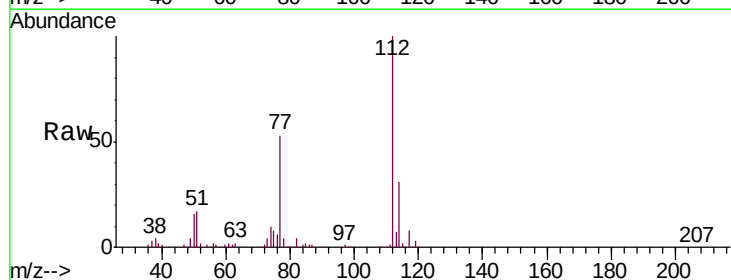
Ion 109.00 (108.70 to 109.70): V

Ion 187.90 (187.60 to 188.60): V



#51  
Chlorobenzene  
Concen: 5.188 ug/L  
RT: 8.93 min Scan# 2437  
Delta R.T. 0.00 min  
Lab File: VV010572.D  
Acq: 30 Apr 2019 02:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 31.0  | 22.7  | 42.3  |
| 77      | 52.7  | 41.0  | 61.6  |

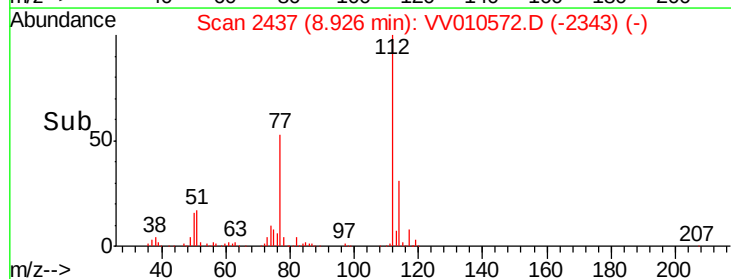
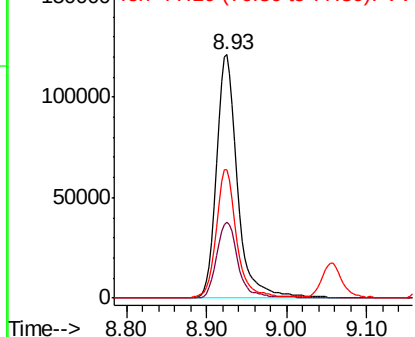


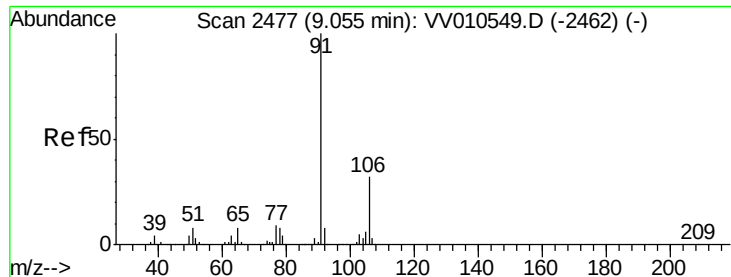
Abundance

Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VV0





#52

Ethylbenzene

Concen: 5.378 ug/L

RT: 9.05 min Scan# 2477

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

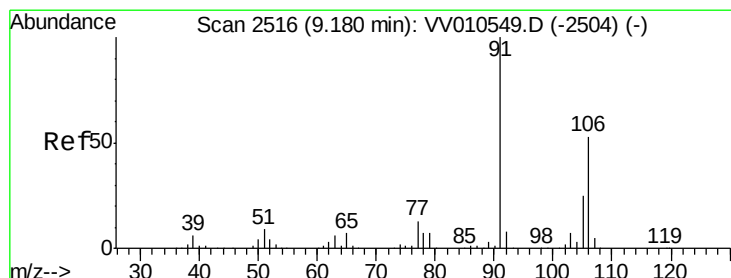
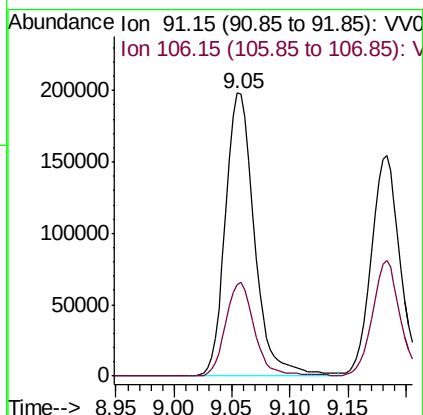
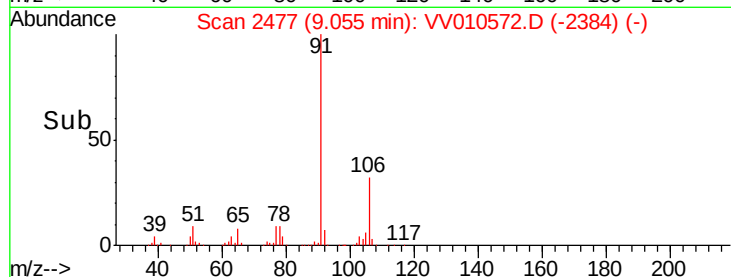
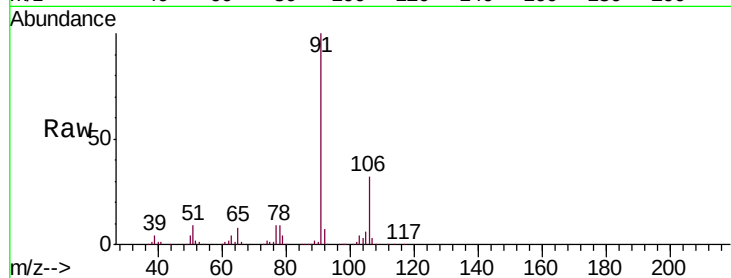
VSTD00552

Tgt Ion: 91 Resp: 344469

Ion Ratio Lower Upper

91 100

106 32.5 23.0 42.6



#53

m,p-xylene

Concen: 5.590 ug/L

RT: 9.18 min Scan# 2517

Delta R.T. 0.00 min

Lab File: VV010572.D

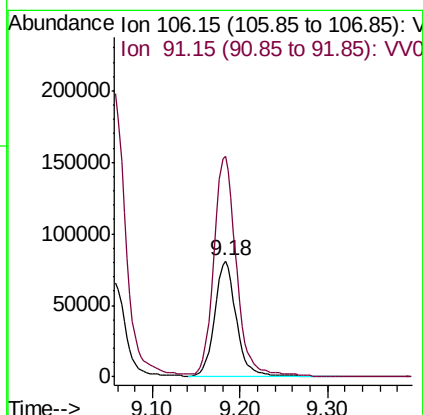
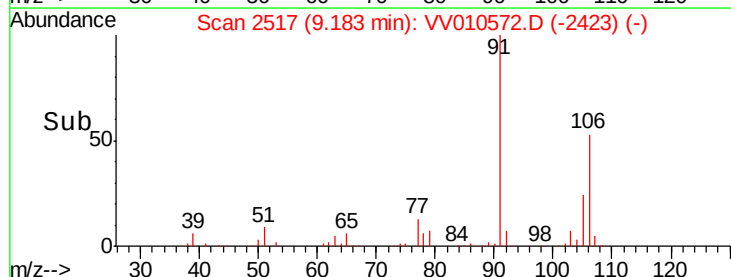
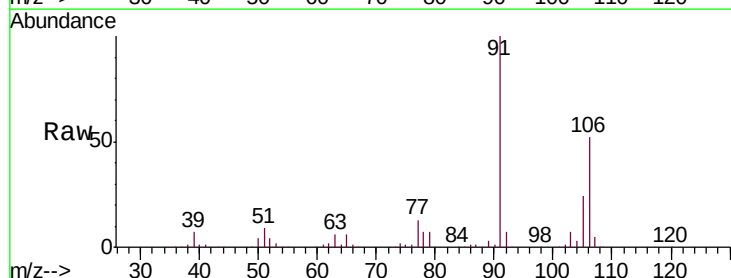
Acq: 30 Apr 2019 02:06

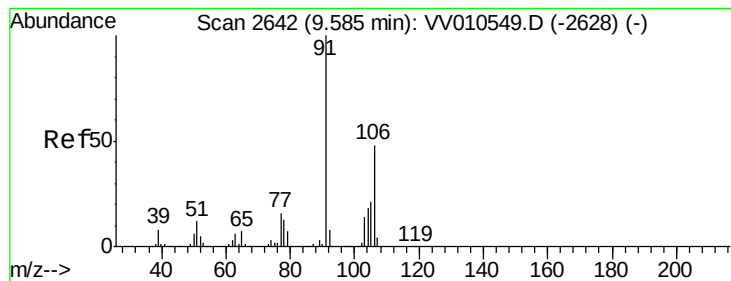
Tgt Ion: 106 Resp: 140658

Ion Ratio Lower Upper

106 100

91 190.5 140.5 260.9





#54

o-xylene

Concen: 5.573 ug/L

RT: 9.59 min Scan# 2643

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

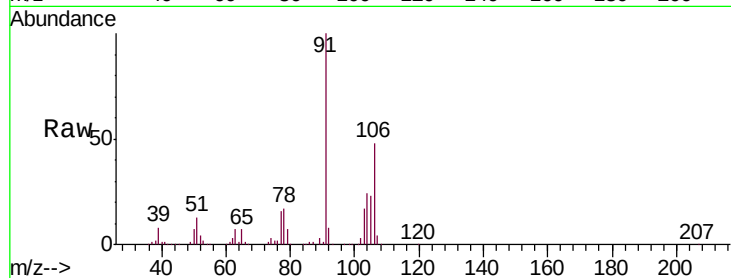
VSTD00552

Tgt Ion:106 Resp: 137093

Ion Ratio Lower Upper

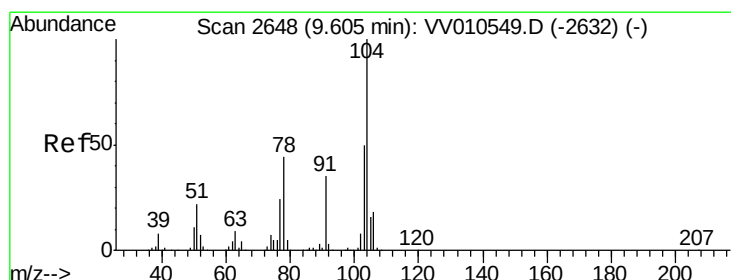
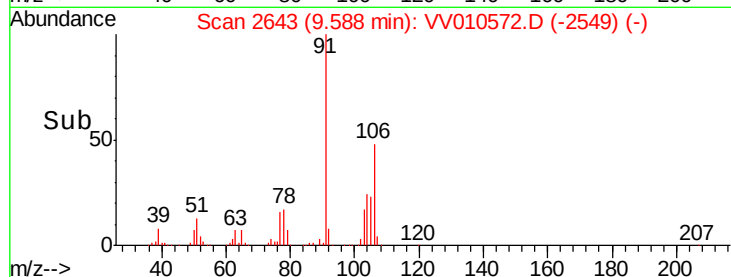
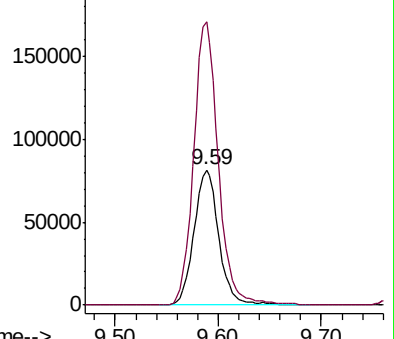
106 100

91 209.2 146.4 272.0



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 5.438 ug/L

RT: 9.60 min Scan# 2648

Delta R.T. -0.00 min

Lab File: VV010572.D

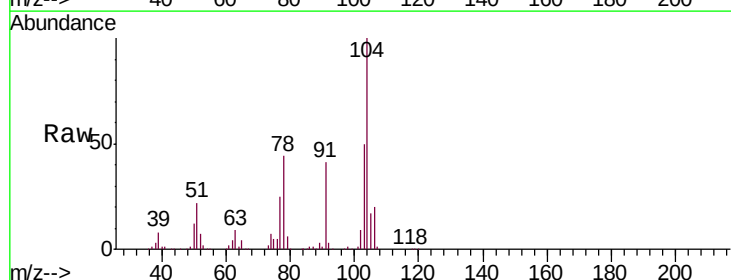
Acq: 30 Apr 2019 02:06

Tgt Ion:104 Resp: 221273

Ion Ratio Lower Upper

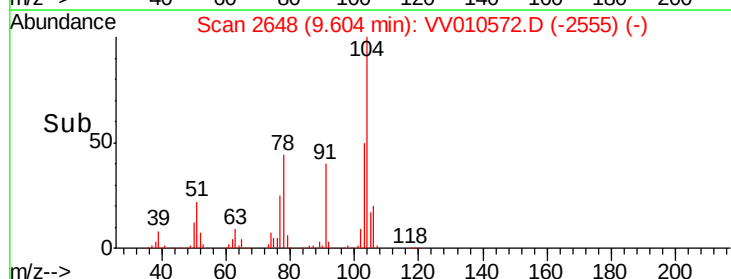
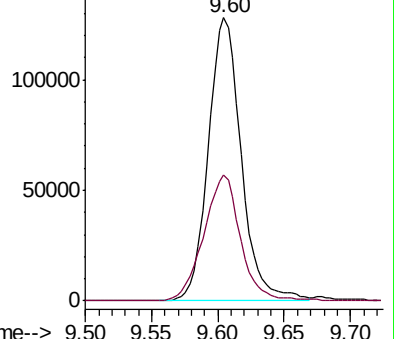
104 100

78 44.3 29.5 54.9

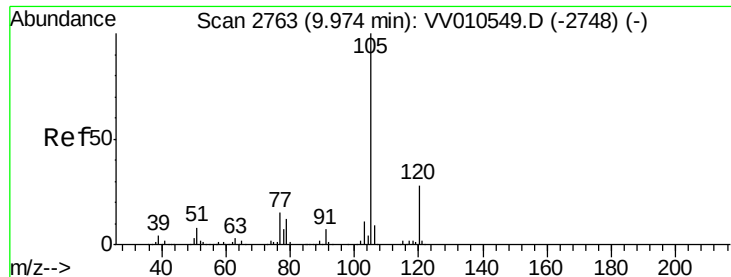


Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0







#56

Isopropylbenzene

Concen: 5.519 ug/L

RT: 9.97 min Scan# 2763

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00552

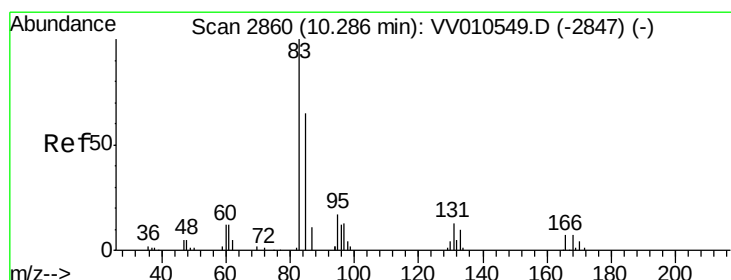
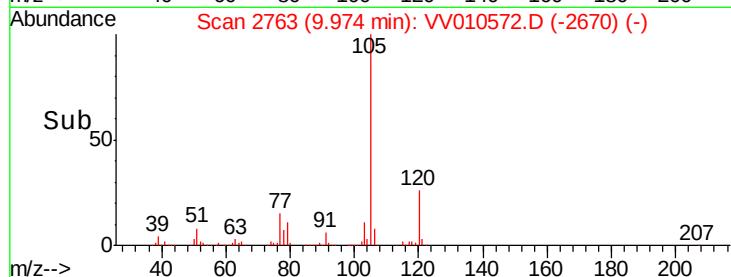
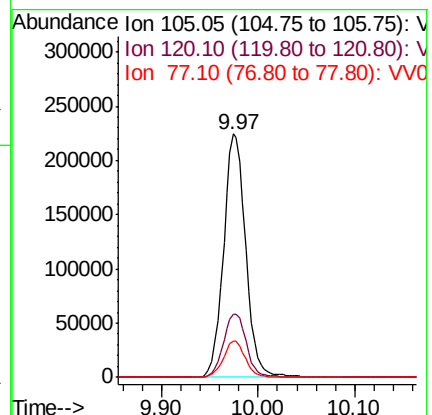
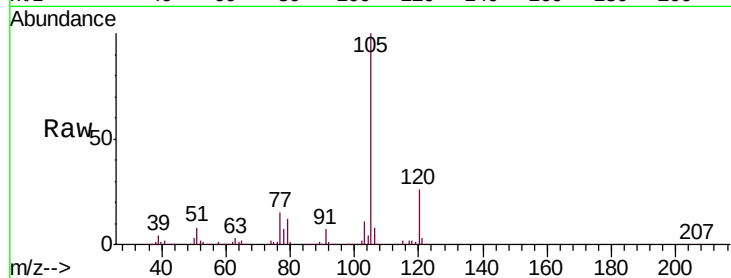
Tgt Ion:105 Resp: 355868

Ion Ratio Lower Upper

105 100

120 27.0 21.9 32.9

77 14.9 11.6 17.4



#58

1,1,2,2-Tetrachloroethane

Concen: 4.605 ug/L

RT: 10.29 min Scan# 2860

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

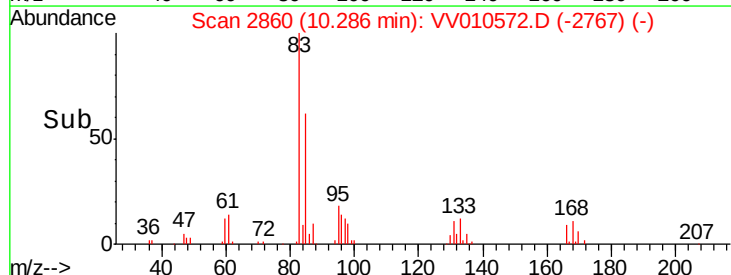
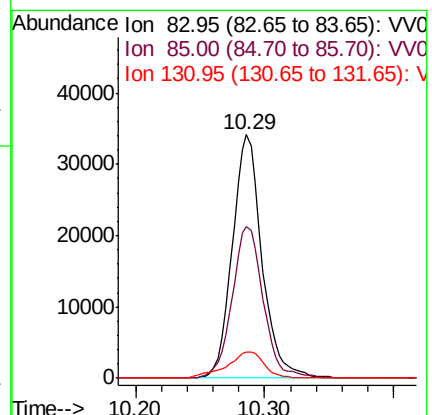
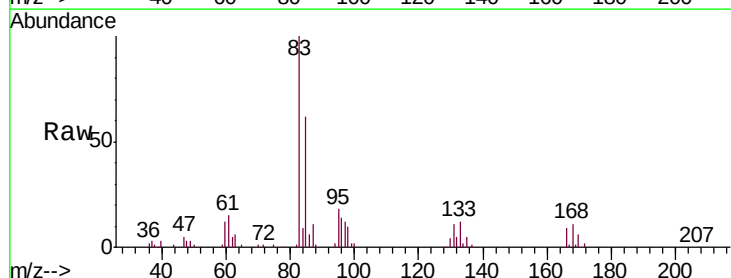
Tgt Ion: 83 Resp: 54373

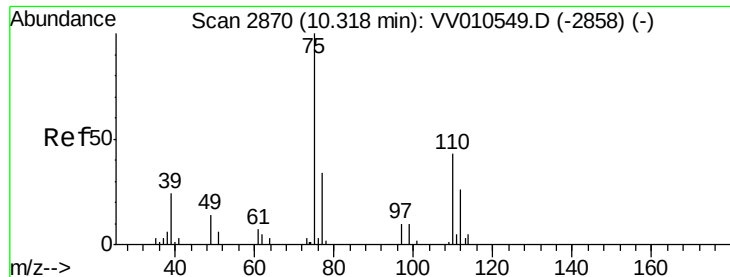
Ion Ratio Lower Upper

83 100

85 62.4 45.6 84.6

131 10.9 9.8 14.8





#59

1,2,3-Trichloropropane

Concen: 4.781 ug/L

RT: 10.32 min Scan# 2870

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

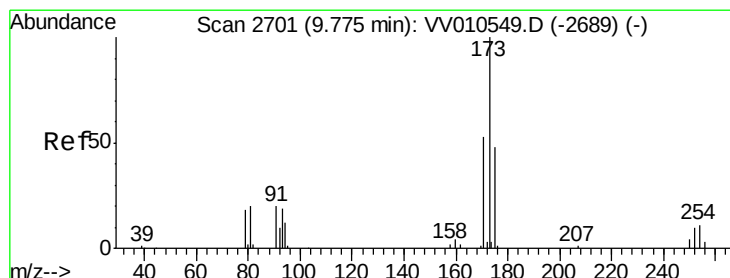
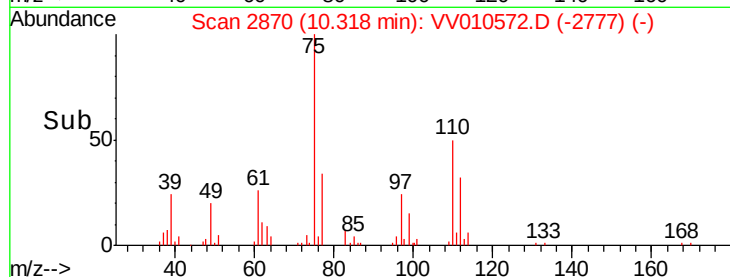
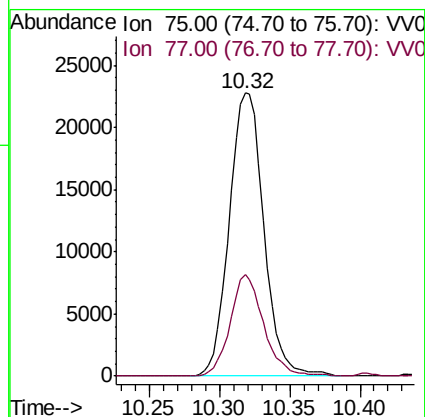
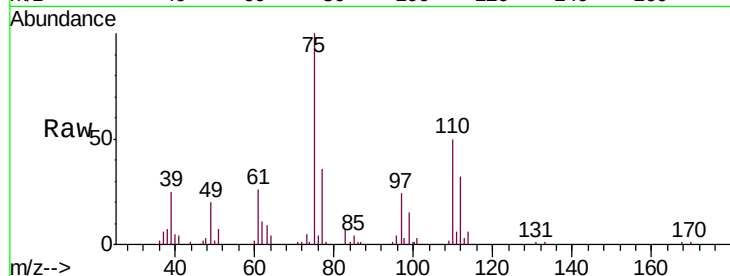
VSTD00552

Tgt Ion: 75 Resp: 39098

Ion Ratio Lower Upper

75 100

77 34.4 26.9 40.3



#61

Bromoform

Concen: 5.259 ug/L

RT: 9.78 min Scan# 2702

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

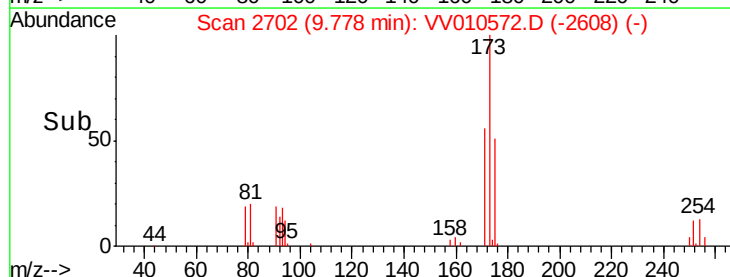
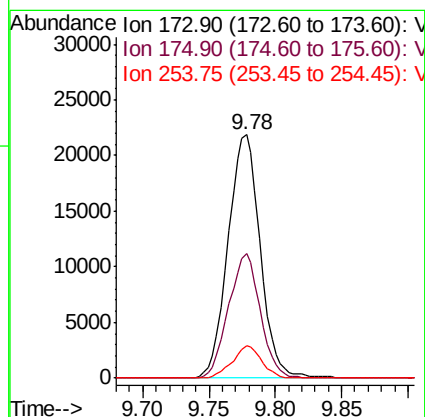
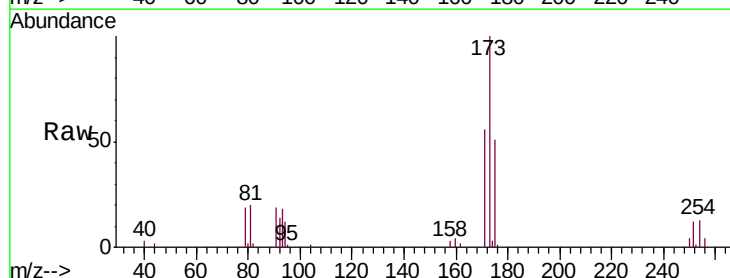
Tgt Ion: 173 Resp: 36898

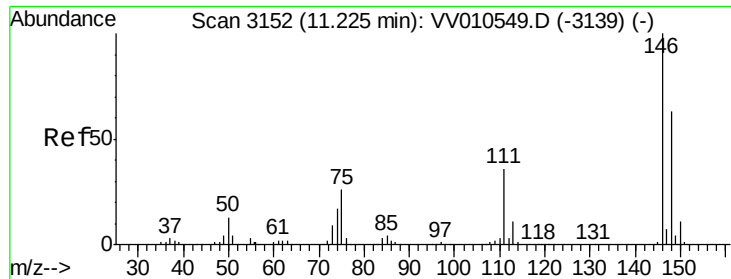
Ion Ratio Lower Upper

173 100

175 50.0 39.1 58.7

254 12.0 8.8 13.2





#62

1,3-Dichlorobenzene

Concen: 5.334 ug/L

RT: 11.22 min Scan# 3152

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

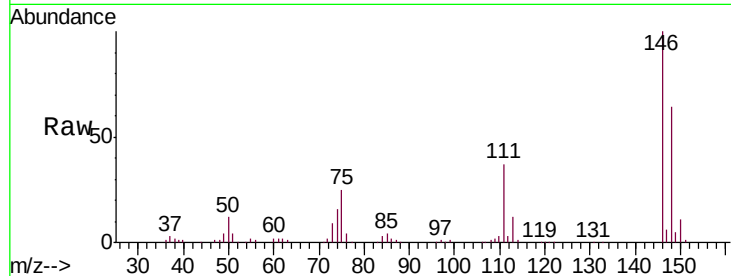
Instrument :

MSVOA\_V

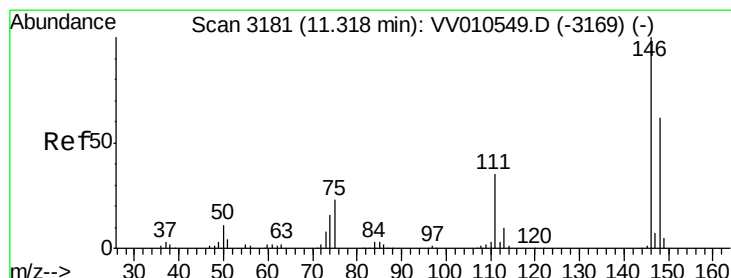
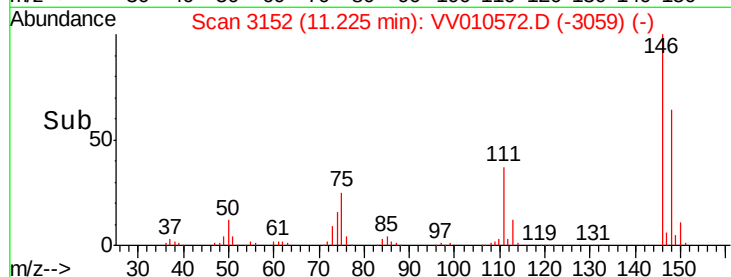
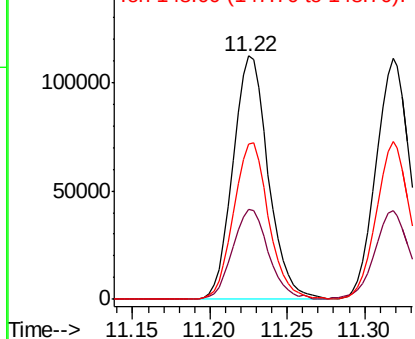
ClientSampleID :

VSTD00552

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 177657 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 37.2  | 26.0  | 48.4   |
| 148      | 64.0  | 44.9  | 83.5   |



Abundance Ion 145.95 (145.65 to 146.65): V  
150000 Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 5.126 ug/L

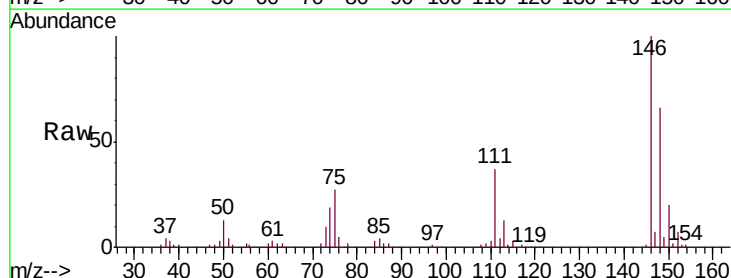
RT: 11.32 min Scan# 3181

Delta R.T. -0.00 min

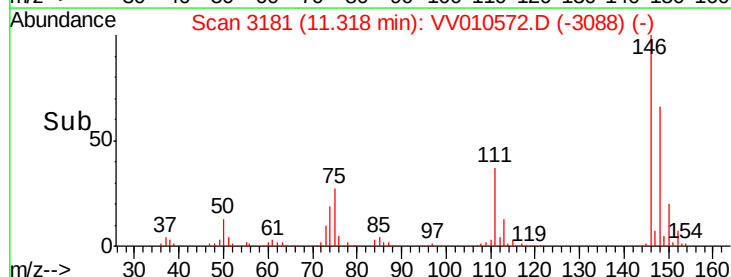
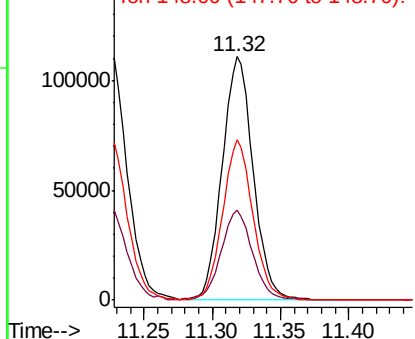
Lab File: VV010572.D

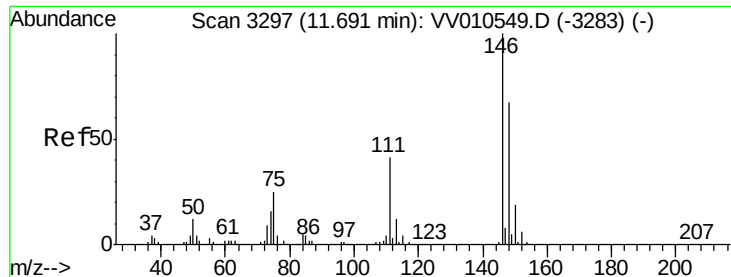
Acq: 30 Apr 2019 02:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 146   | Resp: | 175055 |
| Ion      | Ratio | Lower | Upper  |
| 146      | 100   |       |        |
| 111      | 37.0  | 24.3  | 45.1   |
| 148      | 65.7  | 44.9  | 83.3   |



Abundance Ion 145.95 (145.65 to 146.65): V  
150000 Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V

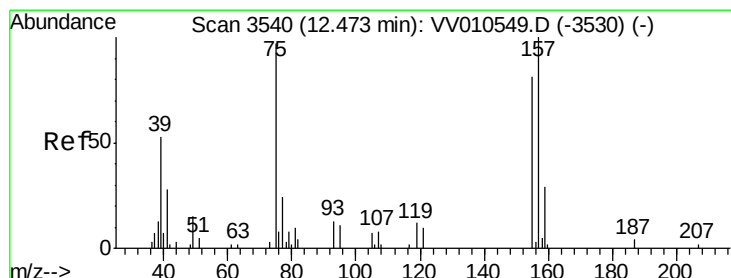
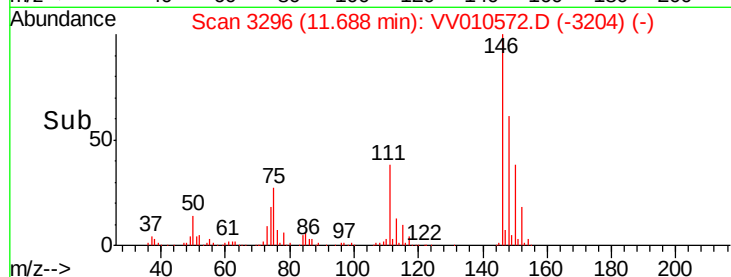
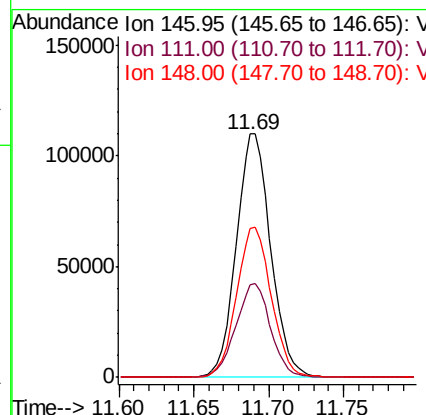
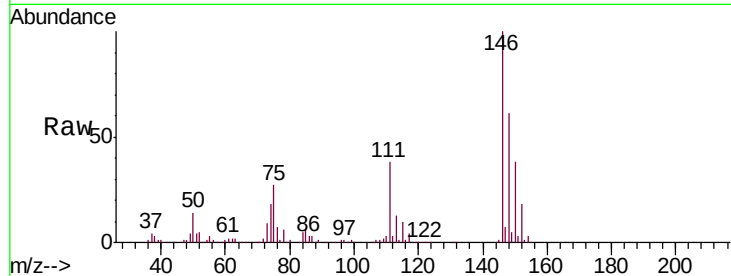




#65  
 1,2-Dichlorobenzene  
 Concen: 5.359 ug/L  
 RT: 11.69 min Scan# 3296  
 Delta R.T. -0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

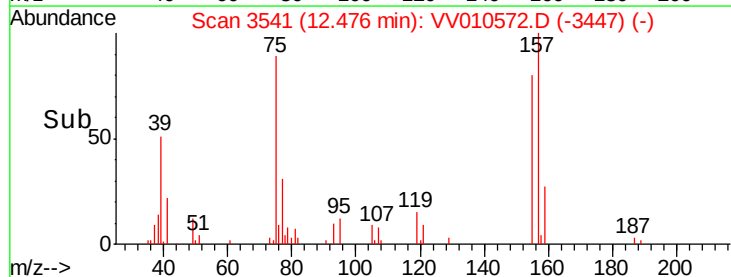
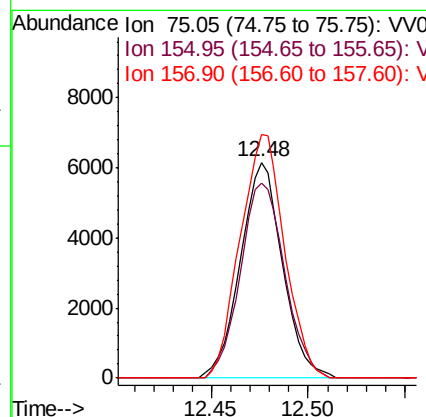
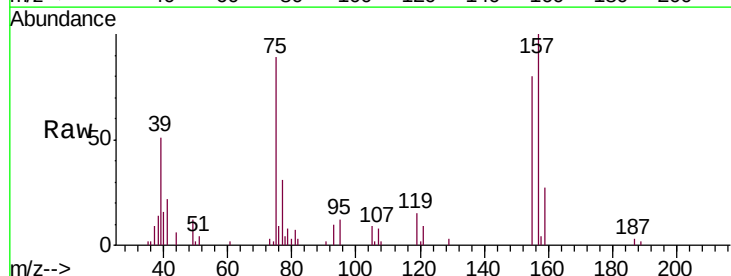
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD00552

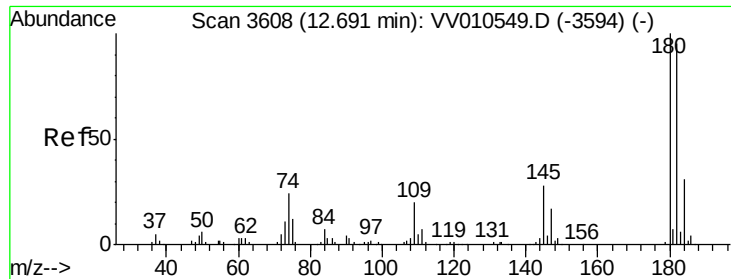
Tgt Ion:146 Resp: 175752  
 Ion Ratio Lower Upper  
 146 100  
 111 38.2 31.8 47.8  
 148 61.1 51.9 77.9



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 5.138 ug/L  
 RT: 12.48 min Scan# 3541  
 Delta R.T. 0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Tgt Ion: 75 Resp: 9309  
 Ion Ratio Lower Upper  
 75 100  
 155 90.5 73.4 110.0  
 157 112.7 99.4 149.2

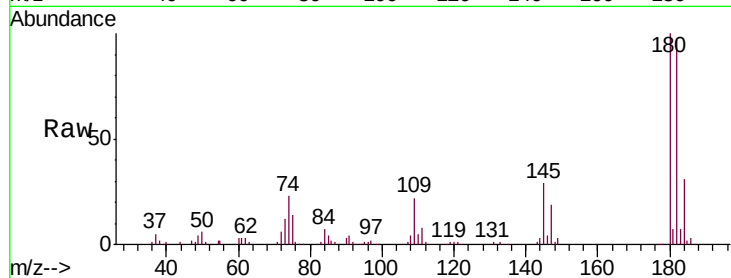




#67  
 1,3,5-Trichlorobenzene  
 Concen: 5.136 ug/L  
 RT: 12.69 min Scan# 3608  
 Delta R.T. -0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD00552

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.9  | 75.4  | 113.0 |
| 184     | 30.2  | 24.6  | 36.8  |
| 145     | 29.6  | 23.2  | 34.8  |



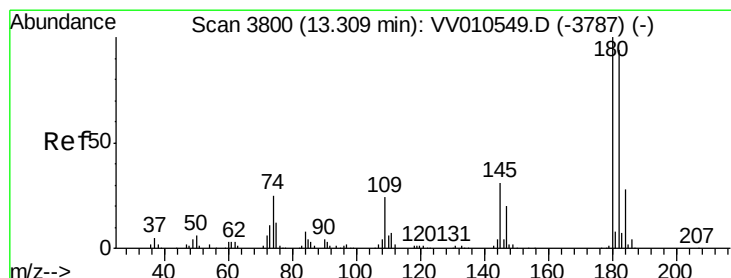
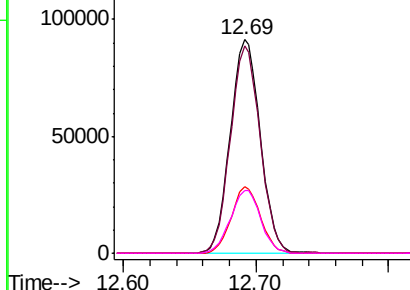
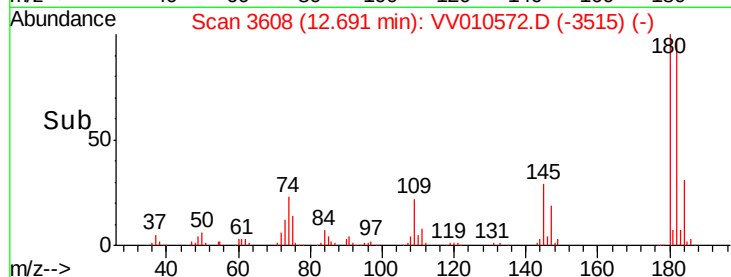
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

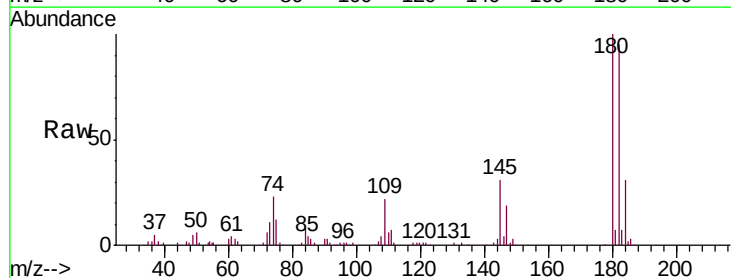
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 5.165 ug/L  
 RT: 13.31 min Scan# 3800  
 Delta R.T. -0.00 min  
 Lab File: VV010572.D  
 Acq: 30 Apr 2019 02:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 97.2  | 77.1  | 115.7 |
| 145     | 29.4  | 25.0  | 37.6  |

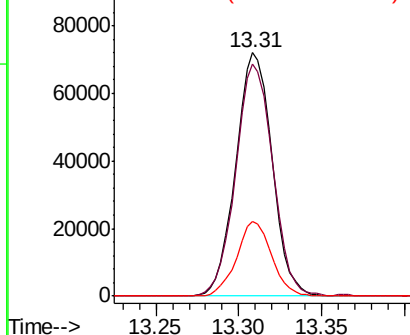
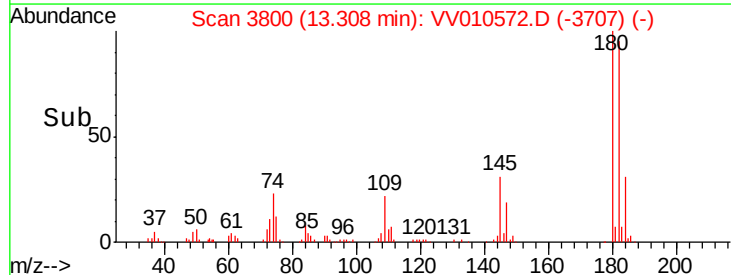


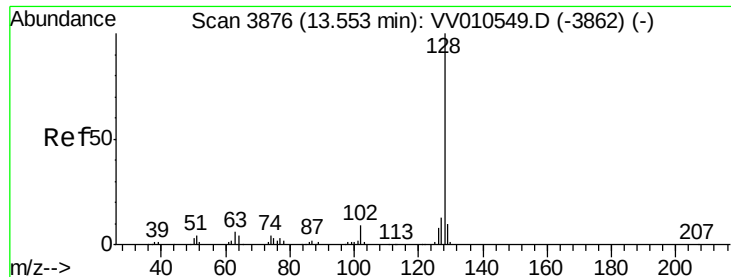
Abundance

Ion 179.90 (179.60 to 180.60): V

Ion 182.00 (181.70 to 182.70): V

Ion 144.95 (144.65 to 145.65): V





#69

Naphthalene

Concen: 4.669 ug/L

RT: 13.55 min Scan# 3875

Delta R.T. -0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

Instrument :

MSVOA\_V

ClientSampleId :

VSTD00552

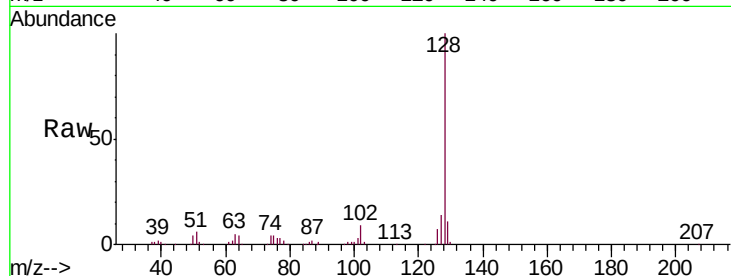
Tgt Ion:128 Resp: 148000

Ion Ratio Lower Upper

128 100

129 10.8 8.4 12.6

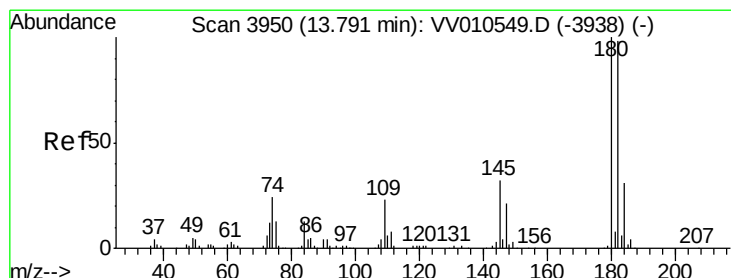
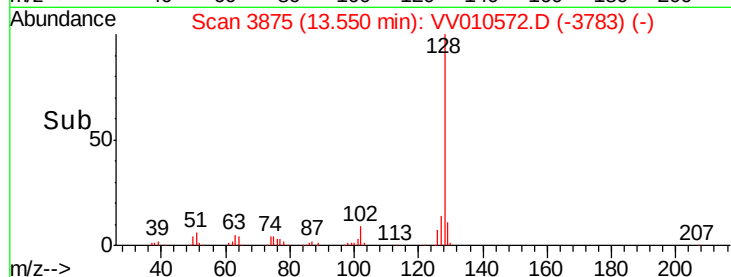
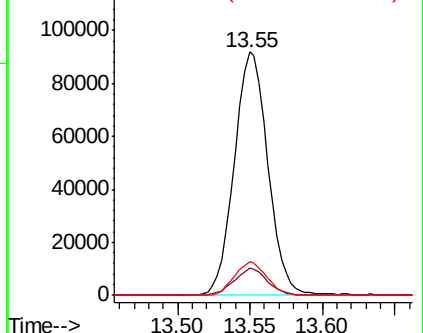
127 13.5 10.0 15.0



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 5.048 ug/L

RT: 13.79 min Scan# 3951

Delta R.T. 0.00 min

Lab File: VV010572.D

Acq: 30 Apr 2019 02:06

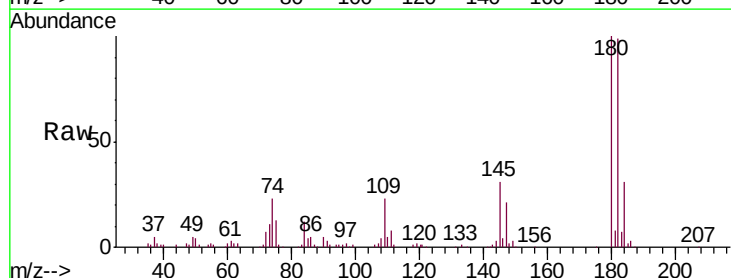
Tgt Ion:180 Resp: 107016

Ion Ratio Lower Upper

180 100

182 96.4 76.0 114.0

145 30.7 24.8 37.2



Abundance Ion 179.90 (179.60 to 180.60): V

Ion 181.90 (181.60 to 182.60): V

Ion 144.95 (144.65 to 145.65): V

