

Data File : VV008584.D  
Acq On : 16 Nov 2018 16:31  
Operator : SY/MD  
Sample : VSTD02065  
Misc : 25.0 mL/MSVOA\_V/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02065

Quant Time: Nov 17 04:21:36 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR111718WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Sat Nov 17 04:17:19 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 156806   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 143360   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 69746    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |        |        |      |      |
|--------------------------------|-------|-----|--------|--------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 146582 | 18.31  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.59  | 69  | 118363 | 19.59  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.14  | 63  | 295993 | 19.44  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.97  | 46  | 556432 | 212.09 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.41  | 84  | 403806 | 20.69  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.09  | 65  | 203891 | 19.90  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.10  | 84  | 788123 | 20.56  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.12  | 67  | 250024 | 20.79  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.36  | 98  | 740719 | 21.27  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.67  | 79  | 105095 | 21.71  | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.14  | 63  | 463089 | 215.44 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 183081 | 21.09  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.68 | 152 | 256402 | 19.76  | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |         |              | Qvalue |
|--------------------------------|------|-----|---------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 272449  | 19.905 ug/L  | 99     |
| 3) Chloromethane               | 1.25 | 50  | 223787  | 19.970 ug/L  | 97     |
| 5) Vinyl chloride              | 1.32 | 62  | 218284  | 20.551 ug/L  | 100    |
| 6) Bromomethane                | 1.54 | 94  | 128730  | 19.898 ug/L  | 99     |
| 8) Chloroethane                | 1.60 | 64  | 123457  | 21.686 ug/L  | 100    |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 281063  | 20.942 ug/L  | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 171687  | 21.184 ug/L  | 97     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 153608  | 21.404 ug/L  | 95     |
| 13) Acetone                    | 2.23 | 43  | 284530  | 207.415 ug/L | 97     |
| 14) Carbon disulfide           | 2.32 | 76  | 487186  | 20.581 ug/L  | 99     |
| 15) Methyl Acetate             | 2.47 | 43  | 72412   | 21.194 ug/L  | 100    |
| 16) Methylene chloride         | 2.54 | 84  | 164688  | 20.418 ug/L  | 99     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 407562  | 21.358 ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 166587  | 20.479 ug/L  | 93     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 430199  | 24.986 ug/L  | 98     |
| 21) 2-Butanone                 | 4.06 | 43  | 637523  | 219.114 ug/L | 98     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 256560  | 20.913 ug/L  | 99     |
| 23) Bromochloromethane         | 4.30 | 128 | 101234  | 21.259 ug/L  | 97     |
| 25) Chloroform                 | 4.43 | 83  | 438259  | 20.786 ug/L  | 99     |
| 27) 1,2-Dichloroethane         | 5.19 | 62  | 269448  | 20.250 ug/L  | 98     |
| 29) 1,1,1-Trichloroethane      | 4.66 | 97  | 387530  | 21.675 ug/L  | 99     |
| 30) Cyclohexane                | 4.73 | 56  | 426872  | 21.444 ug/L  | 100    |
| 31) Carbon tetrachloride       | 4.88 | 117 | 338637  | 21.824 ug/L  | 99     |
| 33) Benzene                    | 5.15 | 78  | 955096  | 21.516 ug/L  | 100    |
| 34) Trichloroethene            | 5.96 | 95  | 255371  | 21.525 ug/L  | 99     |
| 35) Methylcyclohexane          | 6.18 | 83  | 437535  | 22.341 ug/L  | 99     |
| 37) 1,2-Dichloropropane        | 6.23 | 63  | 247543  | 20.750 ug/L  | 99     |
| 38) Bromodichloromethane       | 6.56 | 83  | 301814  | 21.605 ug/L  | 100    |
| 39) cis-1,3-Dichloropropene    | 7.07 | 75  | 371926  | 23.095 ug/L  | 97     |
| 40) 4-Methyl-2-pentanone       | 7.28 | 43  | 1475744 | 208.758 ug/L | 100    |

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Sat Nov 17 04:17:19 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 42) Toluene                    | 7.43  | 91   | 998584   | 21.624  | ug/L  | 96       |
| 44) trans-1,3-Dichloropropene  | 7.70  | 75   | 301448   | 23.300  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane      | 7.89  | 97   | 160553   | 21.484  | ug/L  | 98       |
| 47) Tetrachloroethene          | 8.02  | 164  | 183098   | 21.310  | ug/L  | 94       |
| 48) 2-Hexanone                 | 8.19  | 43   | 1051796  | 218.016 | ug/L  | 98       |
| 49) Dibromochloromethane       | 8.29  | 129  | 195018   | 22.621  | ug/L  | 99       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 151968   | 21.741  | ug/L  | 94       |
| 51) Chlorobenzene              | 8.93  | 112  | 627859   | 22.176  | ug/L  | 97       |
| 52) Ethylbenzene               | 9.06  | 91   | 1130977  | 22.112  | ug/L  | 100      |
| 53) m,p-xylene                 | 9.18  | 106  | 419117   | 22.427  | ug/L  | 98       |
| 54) o-xylene                   | 9.59  | 106  | 402957   | 22.432  | ug/L  | 96       |
| 55) Styrene                    | 9.61  | 104  | 686838   | 22.944  | ug/L  | 99       |
| 56) Isopropylbenzene           | 9.98  | 105  | 1109518  | 22.765  | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 195200   | 21.945  | ug/L  | 98       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 143689   | 21.222  | ug/L  | 98       |
| 61) Bromoform                  | 9.78  | 173  | 99720    | 21.898  | ug/L  | 98       |
| 62) 1,3-Dichlorobenzene        | 11.23 | 146  | 476623   | 20.734  | ug/L  | 97       |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 476342   | 21.209  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 438064   | 20.355  | ug/L  | 97       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 31906    | 20.018  | ug/L  | 87       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 353595   | 22.168  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 303273   | 24.350  | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 499680   | 22.419  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.80 | 180  | 272492   | 22.688  | ug/L  | 100      |

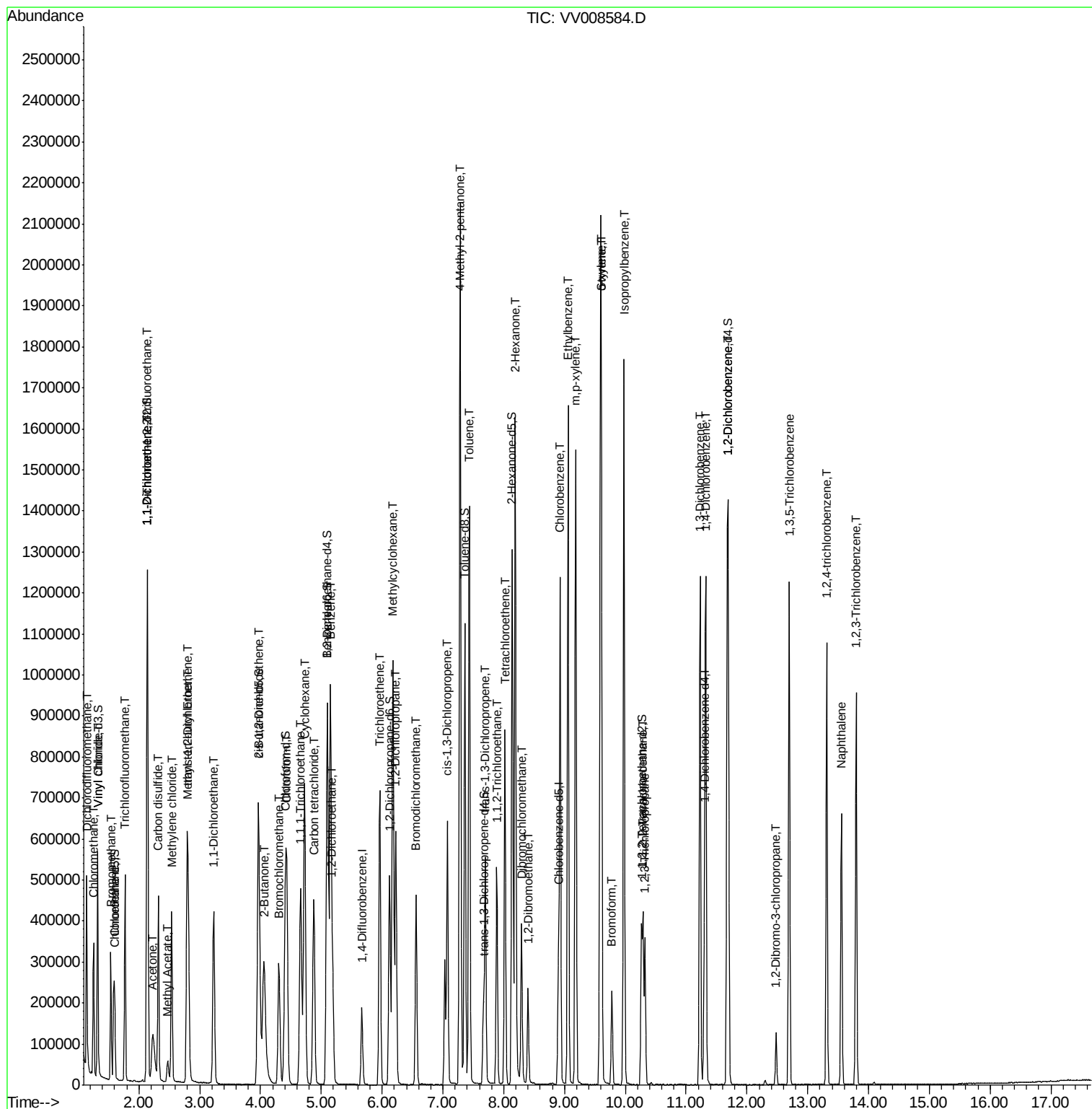
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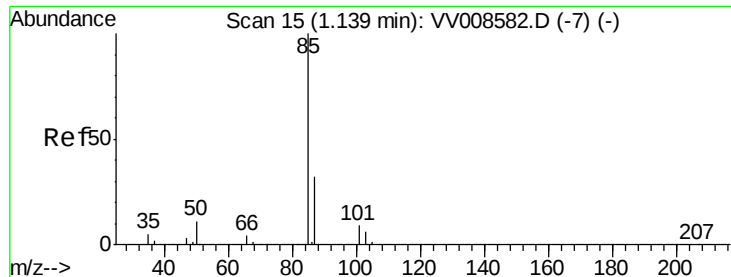
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#2

Dichlorodifluoromethane

Concen: 19.905 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

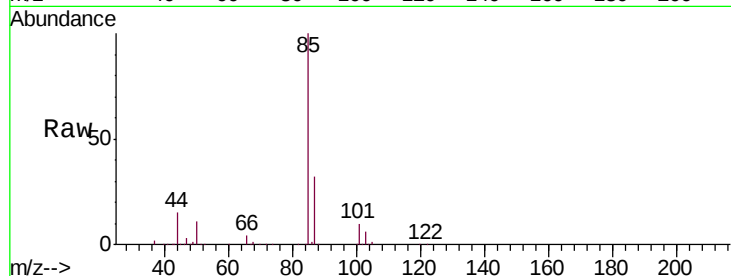
VSTD02065

Tgt Ion: 85 Resp: 272449

Ion Ratio Lower Upper

85 100

87 32.6 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VV008582.D (-7) (-)

Ion 87.00 (86.70 to 87.70): VV008584.D (-1) (-)

1.14

250000

200000

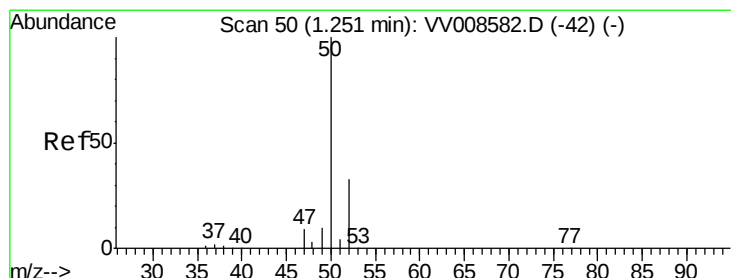
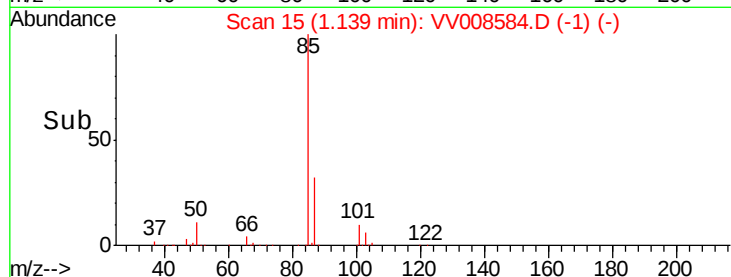
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: 19.970 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV008584.D

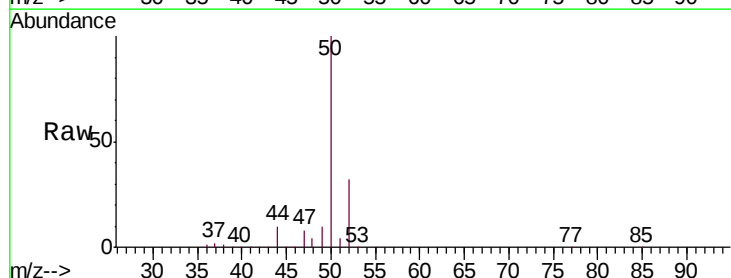
Acq: 16 Nov 2018 16:31

Tgt Ion: 50 Resp: 223787

Ion Ratio Lower Upper

50 100

52 31.6 23.3 43.3



Abundance Ion 50.05 (49.75 to 50.75): VV008582.D (-42) (-)

Ion 52.05 (51.75 to 52.75): VV008584.D (-1) (-)

1.25

200000

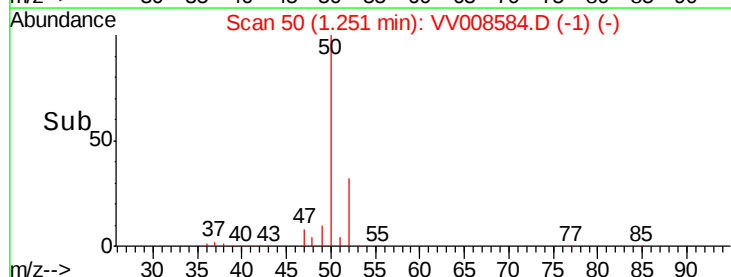
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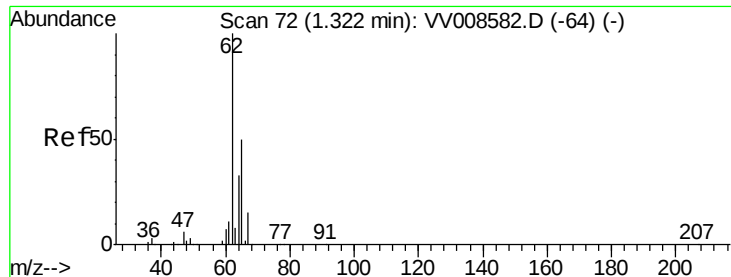
100000

50000

0

Time-->





#5

Vinyl chloride

Concen: 20.551 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

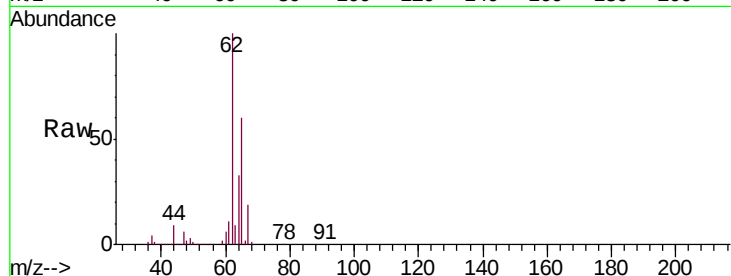
VSTD02065

Tgt Ion: 62 Resp: 218284

Ion Ratio Lower Upper

62 100

64 33.5 23.4 43.4



Abundance Ion 62.00 (61.70 to 62.70): VV008582.D (-64) (-)

Ion 64.10 (63.80 to 64.80): VV008584.D (-1) (-)

1.32

250000

200000

150000

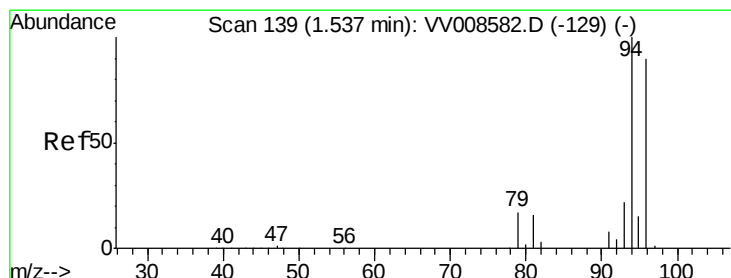
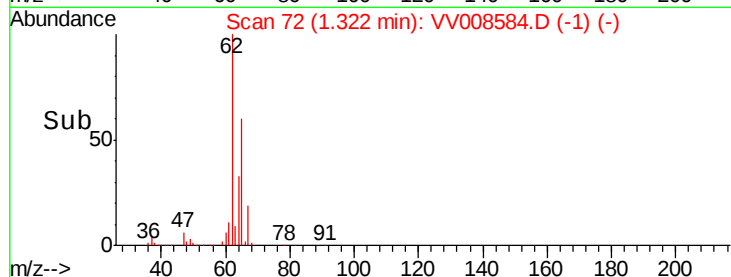
100000

50000

0

1.25 1.30 1.35 1.40 1.45

Time-->



#6

Bromomethane

Concen: 19.898 ug/L

RT: 1.54 min Scan# 139

Delta R.T. 0.00 min

Lab File: VV008584.D

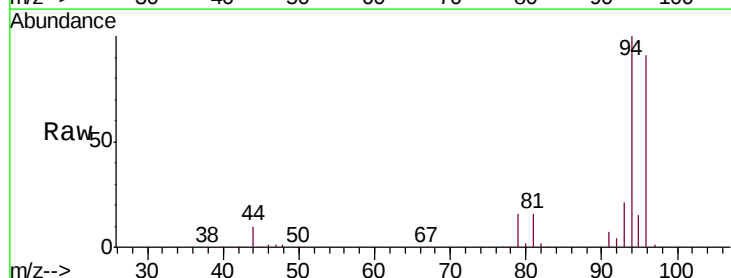
Acq: 16 Nov 2018 16:31

Tgt Ion: 94 Resp: 128730

Ion Ratio Lower Upper

94 100

96 91.4 63.2 117.4



Abundance Ion 94.00 (93.70 to 94.70): VV008582.D (-129) (-)

Ion 96.00 (95.70 to 96.70): VV008584.D (-46) (-)

1.54

120000

100000

80000

60000

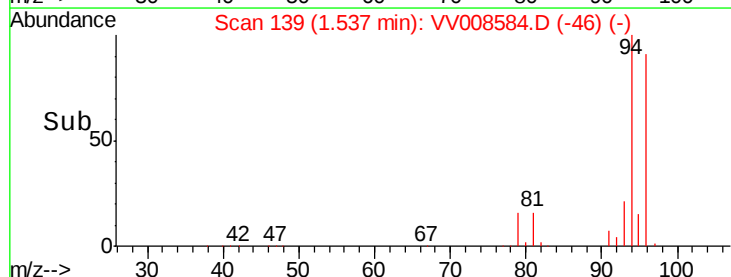
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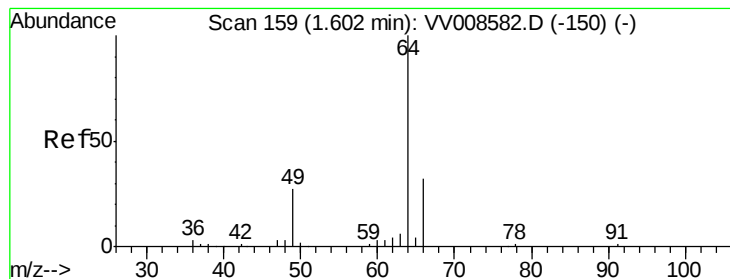
20000

0

1.50 1.55 1.60

Time-->





#8

Chloroethane

Concen: 21.686 ug/L

RT: 1.60 min Scan# 159

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

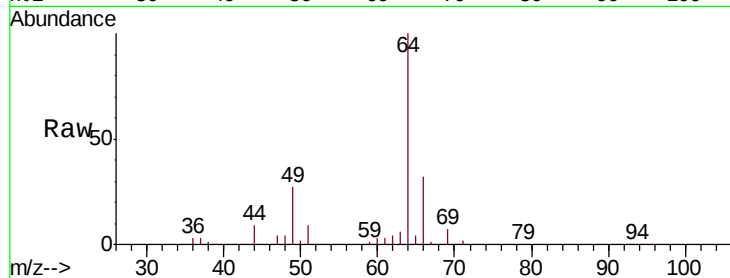
VSTD02065

Tgt Ion: 64 Resp: 123457

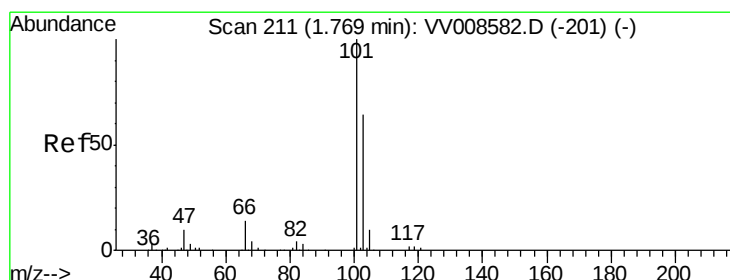
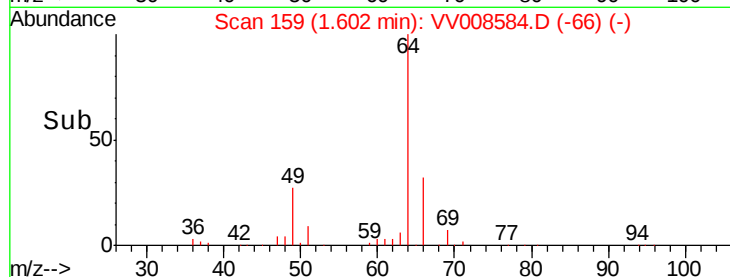
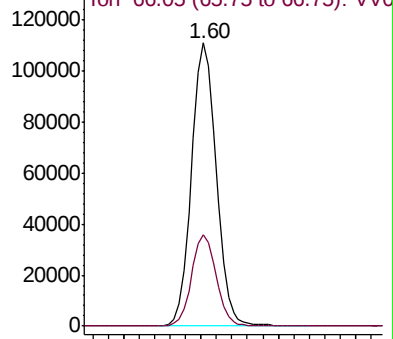
Ion Ratio Lower Upper

64 100

66 32.4 22.7 42.3



Abundance Ion 64.10 (63.80 to 64.80): VV008582.D (-150) (-)



#9

Trichlorofluoromethane

Concen: 20.942 ug/L

RT: 1.77 min Scan# 212

Delta R.T. 0.00 min

Lab File: VV008584.D

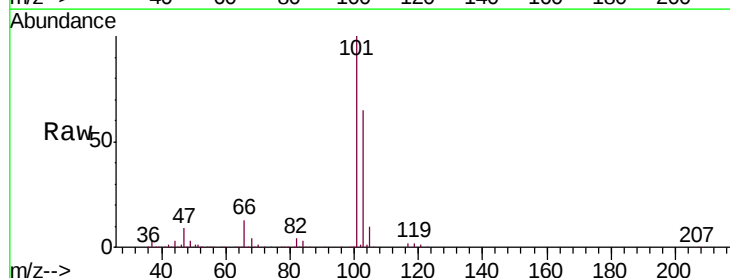
Acq: 16 Nov 2018 16:31

Tgt Ion: 101 Resp: 281063

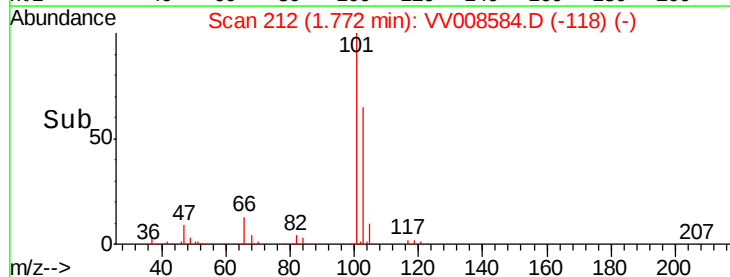
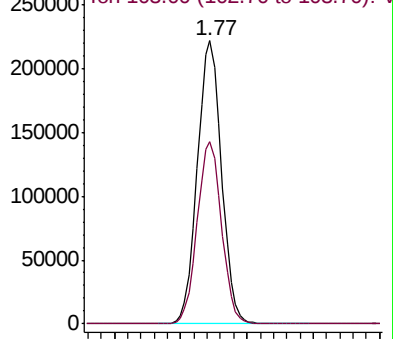
Ion Ratio Lower Upper

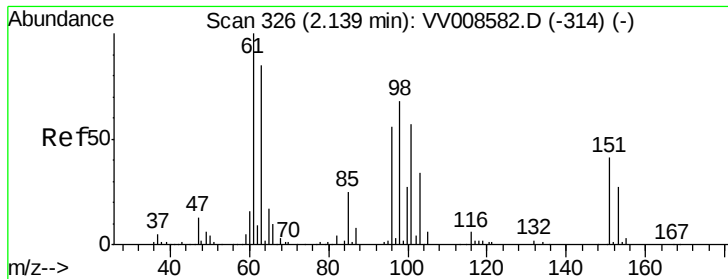
101 100

103 64.8 51.1 76.7



Abundance Ion 101.00 (100.70 to 101.70): VV008582.D (-201) (-)





#10

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

Concen: 21.184 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02065

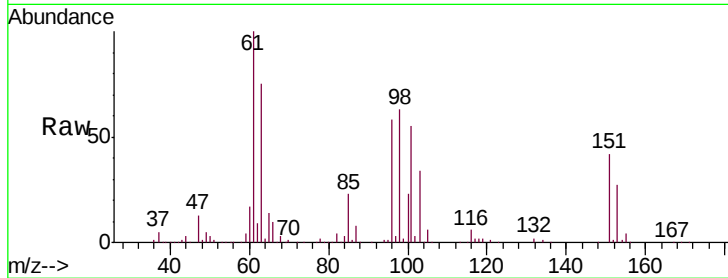
Tgt Ion: 101 Resp: 171687

Ion Ratio Lower Upper

101 100

85 43.3 35.4 53.0

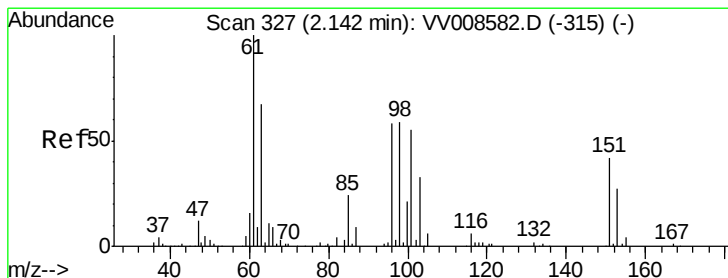
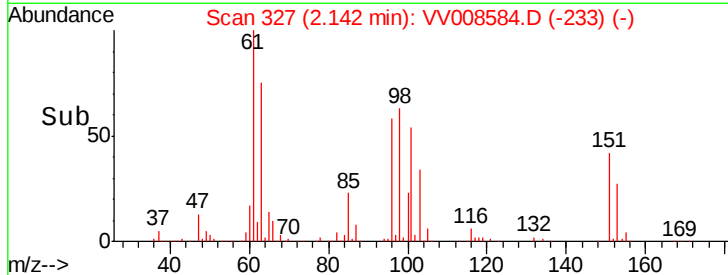
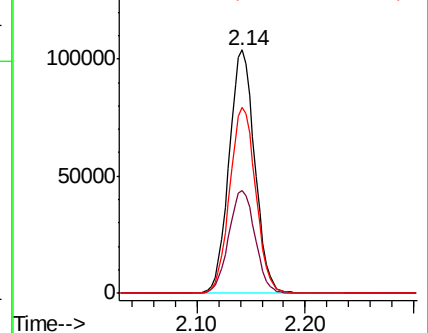
151 77.4 59.4 89.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 21.404 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

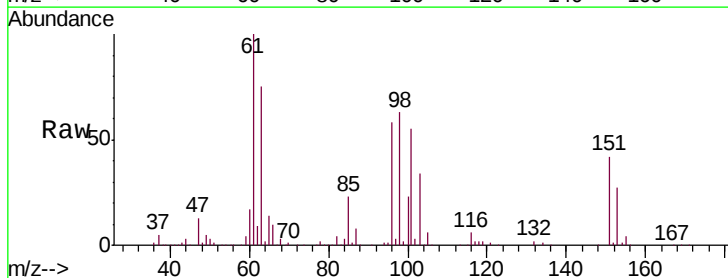
Tgt Ion: 96 Resp: 153608

Ion Ratio Lower Upper

96 100

61 173.4 120.3 223.5

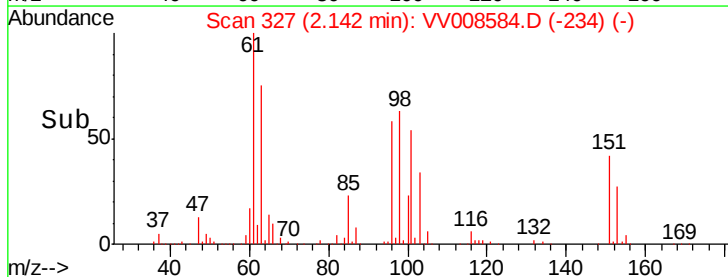
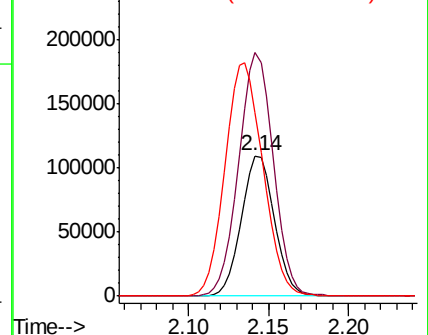
63 130.5 82.5 153.3

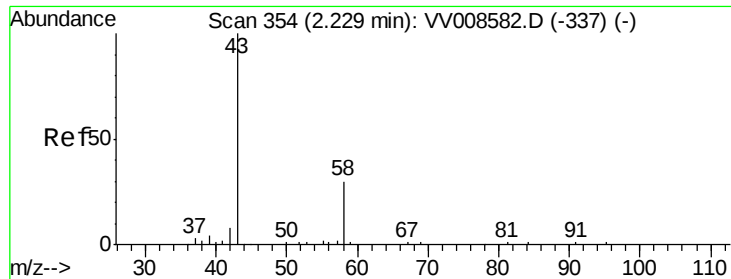


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 207.415 ug/L

RT: 2.23 min Scan# 354

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

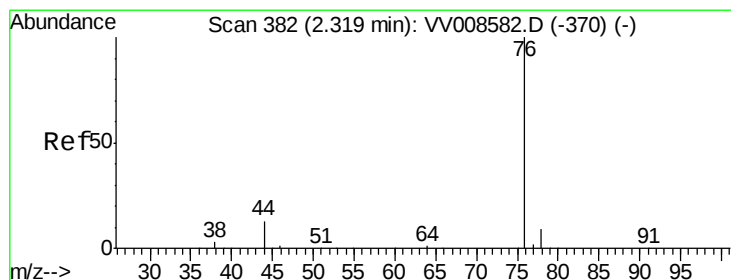
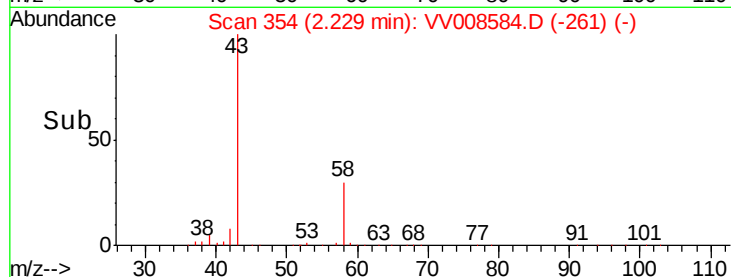
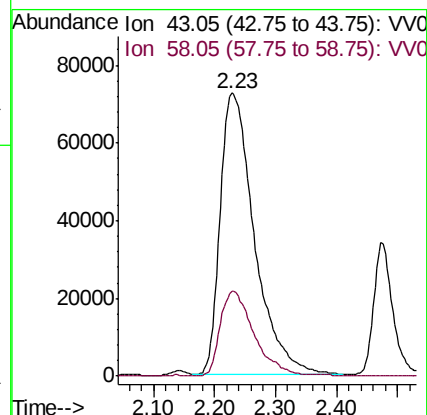
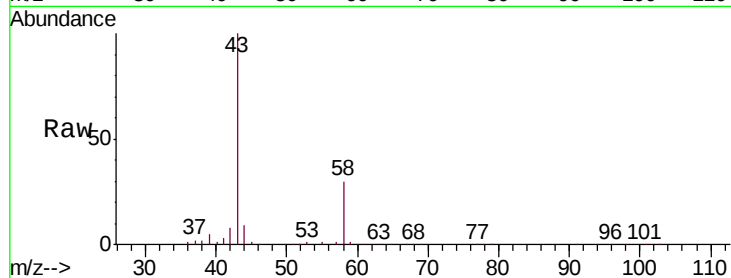
VSTD02065

Tgt Ion: 43 Resp: 284530

Ion Ratio Lower Upper

43 100

58 29.7 0.0 56.4



#14

Carbon disulfide

Concen: 20.581 ug/L

RT: 2.32 min Scan# 382

Delta R.T. 0.00 min

Lab File: VV008584.D

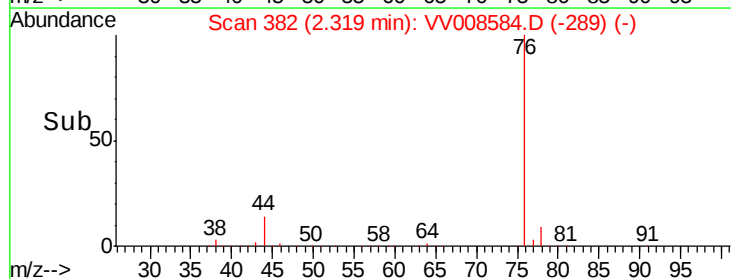
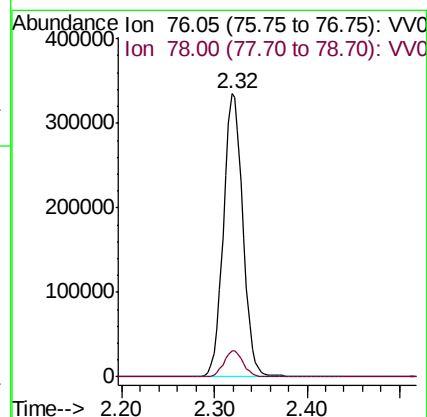
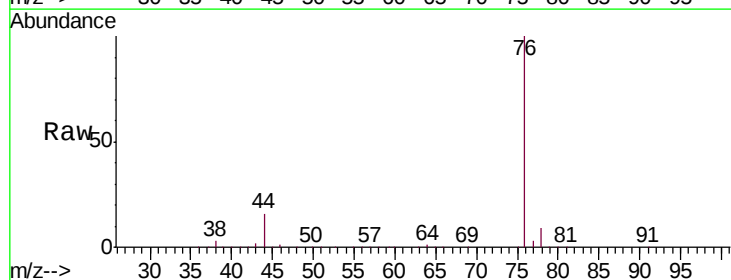
Acq: 16 Nov 2018 16:31

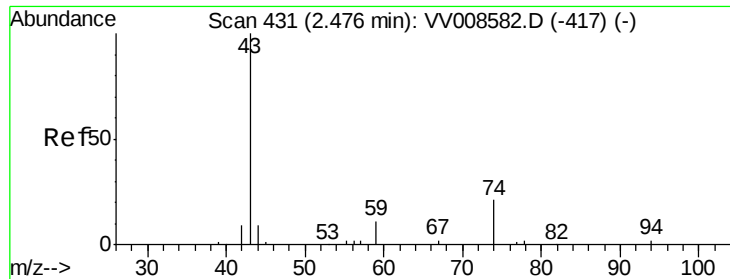
Tgt Ion: 76 Resp: 487186

Ion Ratio Lower Upper

76 100

78 9.2 7.0 10.6

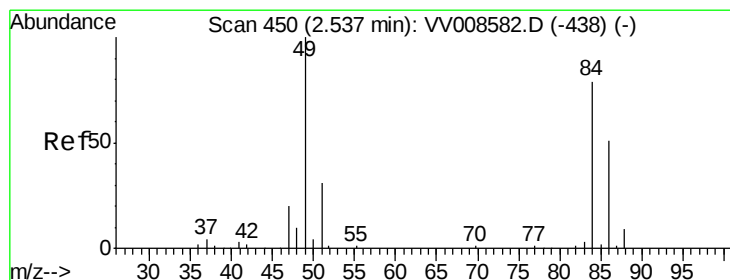
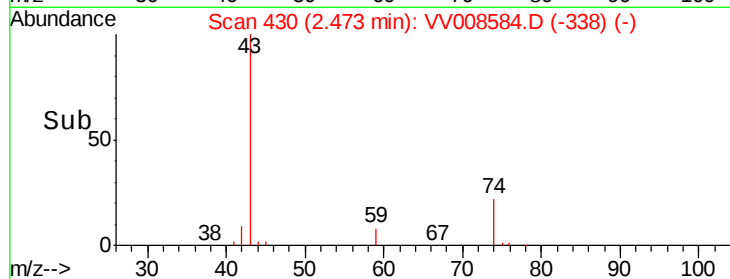
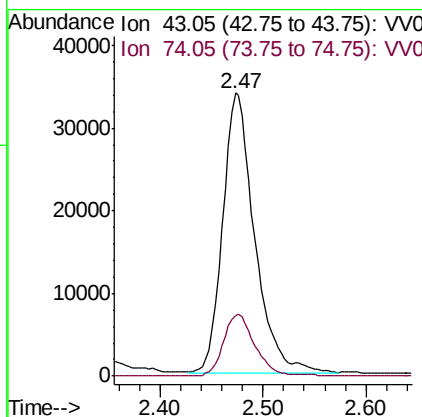
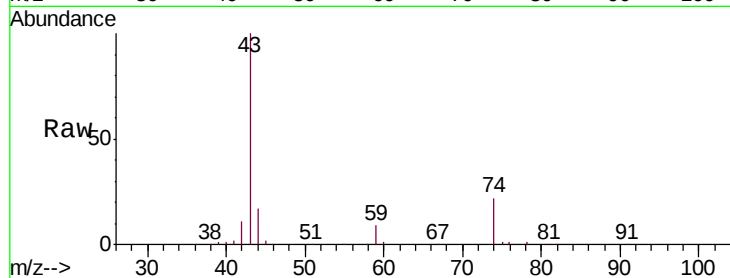




#15  
Methyl Acetate  
Concen: 21.194 ug/L  
RT: 2.47 min Scan# 430  
Delta R.T. -0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

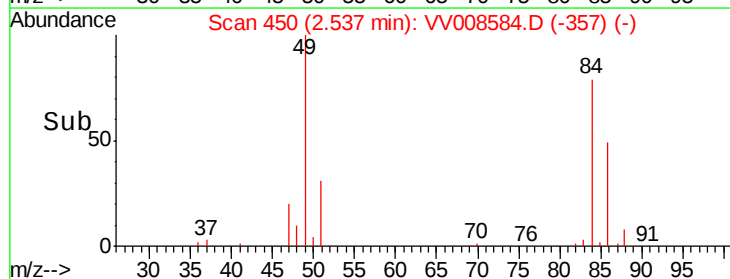
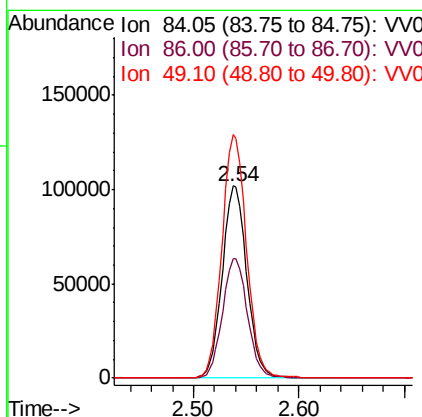
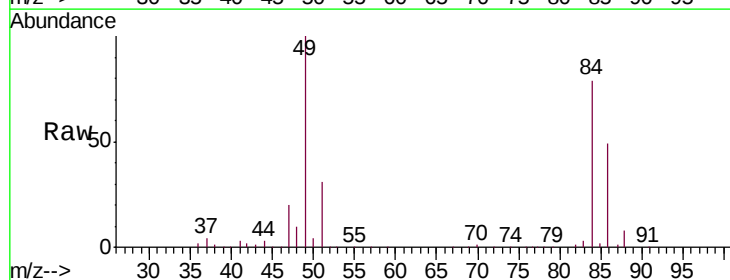
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02065

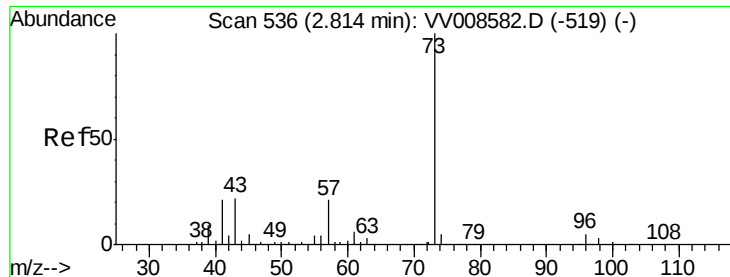
Tgt Ion: 43 Resp: 72412  
Ion Ratio Lower Upper  
43 100  
74 21.9 17.6 26.4



#16  
Methylene chloride  
Concen: 20.418 ug/L  
RT: 2.54 min Scan# 450  
Delta R.T. 0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

Tgt Ion: 84 Resp: 164688  
Ion Ratio Lower Upper  
84 100  
86 62.1 44.8 83.2  
49 127.0 88.1 163.7



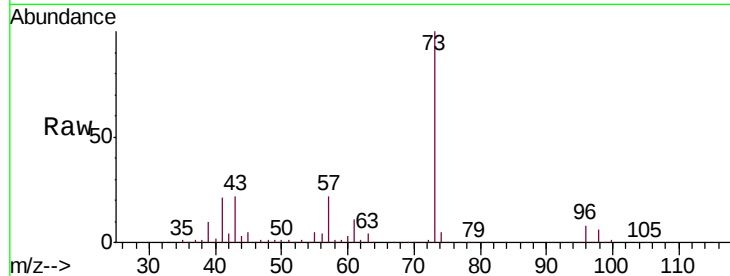


#17

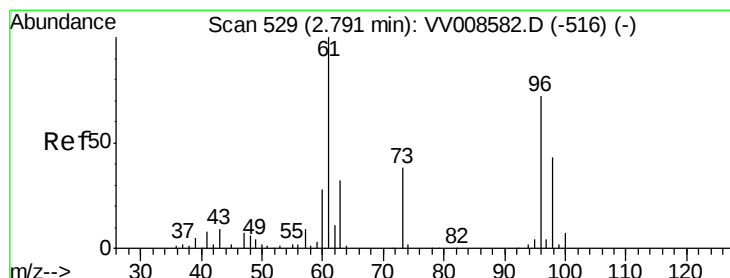
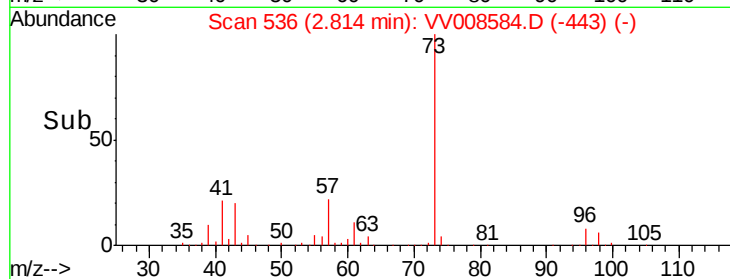
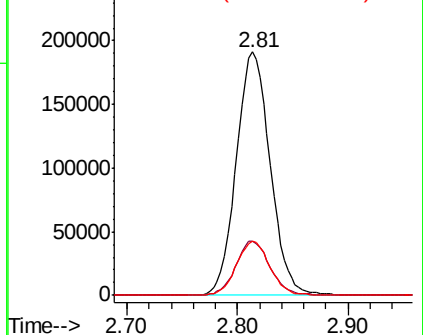
Methyl tert-butyl Ether  
 Concen: 21.358 ug/L  
 RT: 2.81 min Scan# 536  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

Tgt Ion: 73 Resp: 407562  
 Ion Ratio Lower Upper  
 73 100  
 43 22.2 18.1 27.1  
 57 22.0 17.9 26.9



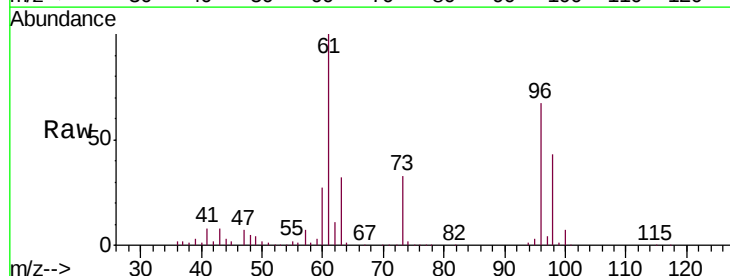
Abundance Ion 73.10 (72.80 to 73.80): VV0  
 Ion 43.05 (42.75 to 43.75): VV0  
 Ion 57.10 (56.80 to 57.80): VV0



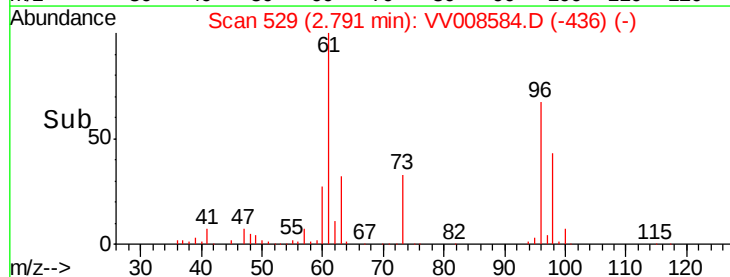
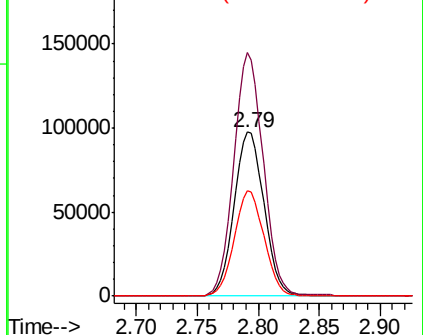
#18

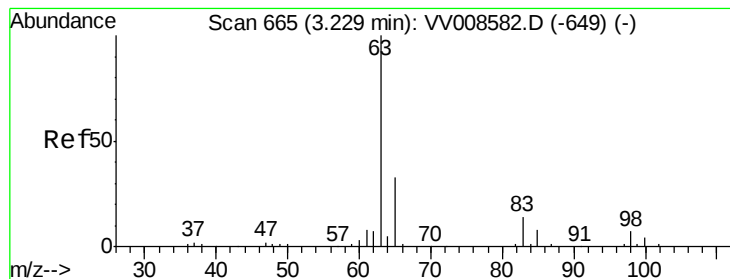
trans-1,2-Dichloroethene  
 Concen: 20.479 ug/L  
 RT: 2.79 min Scan# 529  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Tgt Ion: 96 Resp: 166587  
 Ion Ratio Lower Upper  
 96 100  
 61 148.4 97.1 180.3  
 98 64.1 41.9 77.7



Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0  
 Ion 97.95 (97.65 to 98.65): VV0





#19

1,1-Dichloroethane

Concen: 24.986 ug/L

RT: 3.23 min Scan# 665

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02065

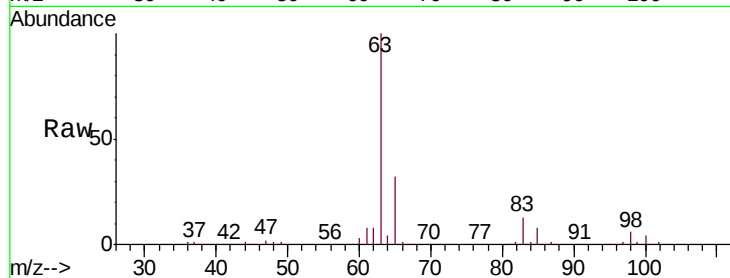
Tgt Ion: 63 Resp: 430199

Ion Ratio Lower Upper

63 100

65 31.7 23.2 43.0

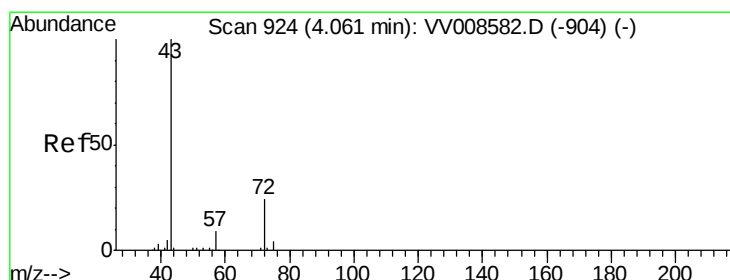
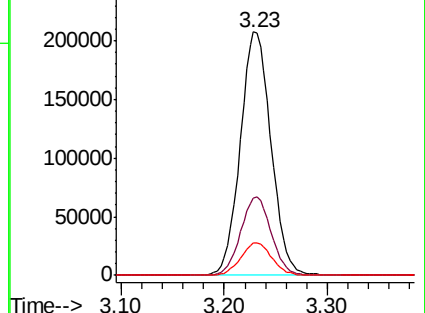
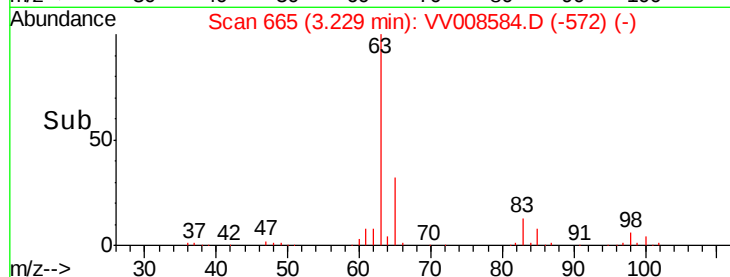
83 13.1 9.5 17.7



Abundance Ion 63.10 (62.80 to 63.80): VV008584.D (-572) (-)

Ion 65.10 (64.80 to 65.80): VV008584.D (-572) (-)

Ion 83.05 (82.75 to 83.75): VV008584.D (-572) (-)



#21

2-Butanone

Concen: 219.114 ug/L

RT: 4.06 min Scan# 923

Delta R.T. -0.00 min

Lab File: VV008584.D

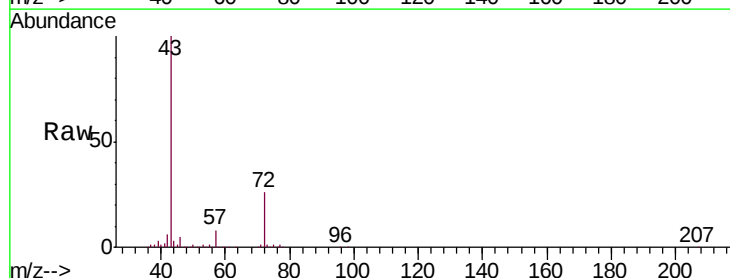
Acq: 16 Nov 2018 16:31

Tgt Ion: 43 Resp: 637523

Ion Ratio Lower Upper

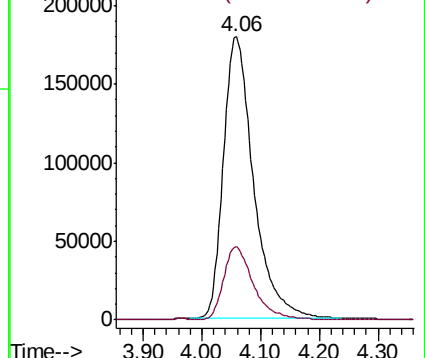
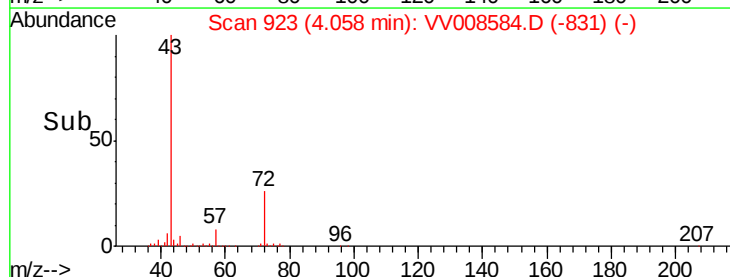
43 100

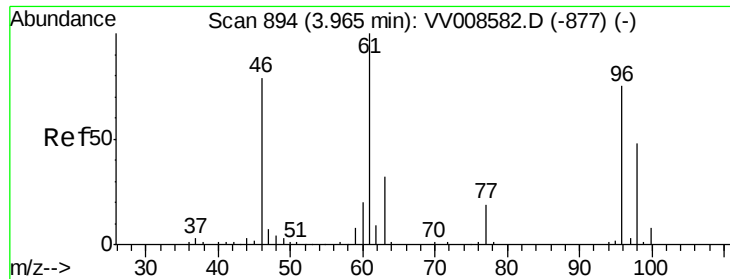
72 25.5 12.3 36.9



Abundance Ion 43.05 (42.75 to 43.75): VV008584.D (-831) (-)

Ion 72.10 (71.80 to 72.80): VV008584.D (-831) (-)



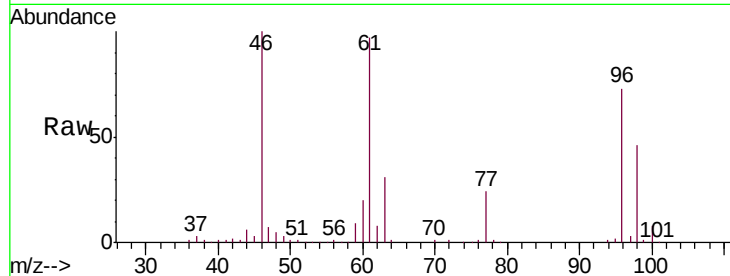


#22

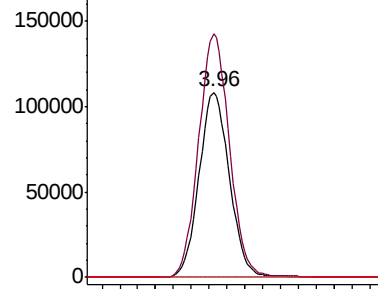
cis-1,2-Dichloroethene  
 Concen: 20.913 ug/L  
 RT: 3.96 min Scan# 894  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

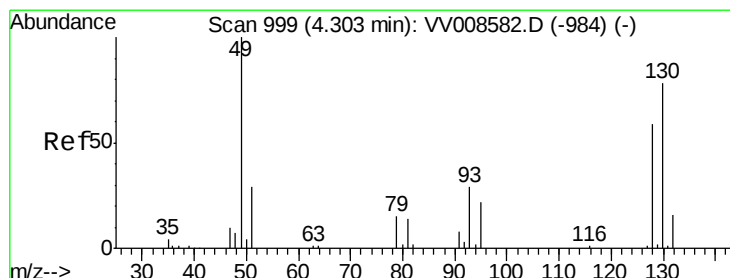
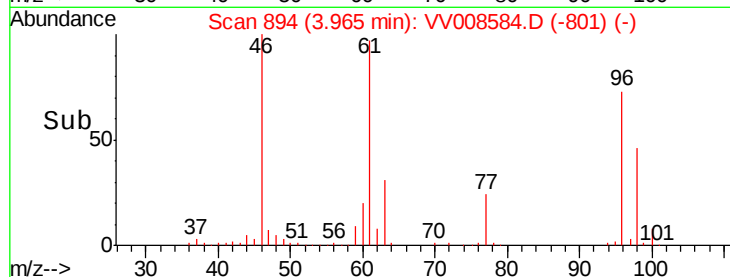
Tgt Ion: 96 Resp: 256560  
 Ion Ratio Lower Upper  
 96 100  
 61 131.6 93.2 173.2  
 68 0.0 0.0 0.0



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



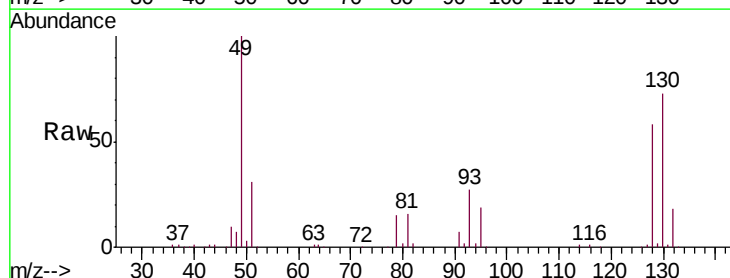
Time-->



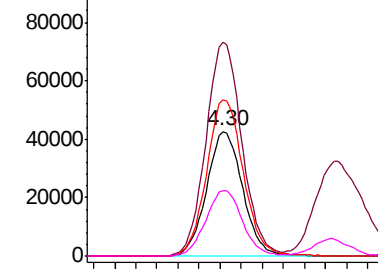
#23

Bromochloromethane  
 Concen: 21.259 ug/L  
 RT: 4.30 min Scan# 999  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

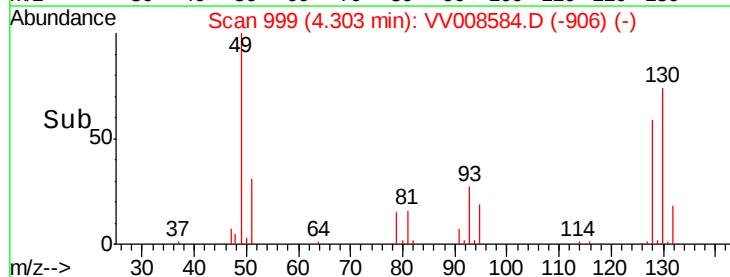
Tgt Ion: 128 Resp: 101234  
 Ion Ratio Lower Upper  
 128 100  
 49 171.4 120.0 222.8  
 130 125.3 92.3 171.3  
 51 52.8 40.0 60.0

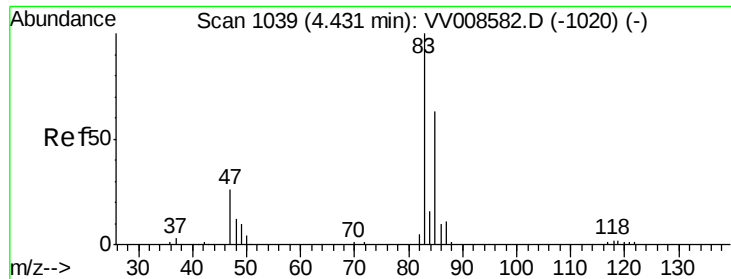


Abundance Ion 127.90 (127.60 to 128.60): V  
 Ion 49.10 (48.80 to 49.80): VV0  
 Ion 129.95 (129.65 to 130.65): V  
 Ion 51.05 (50.75 to 51.75): VV0



Time-->

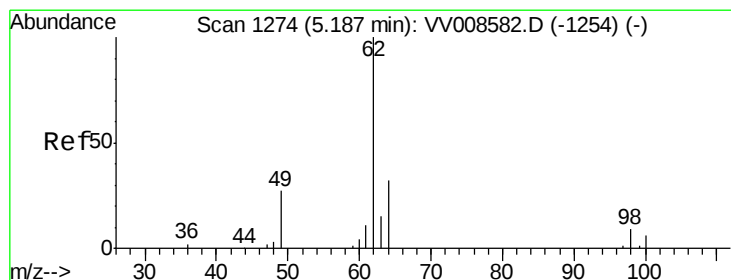
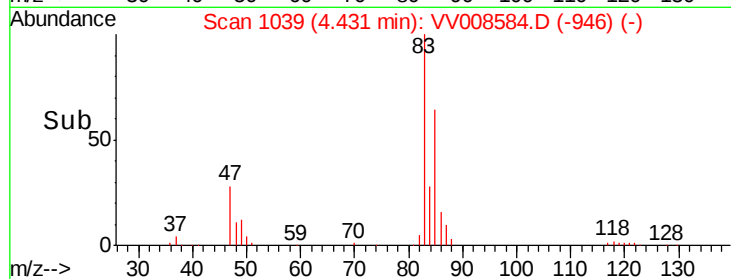
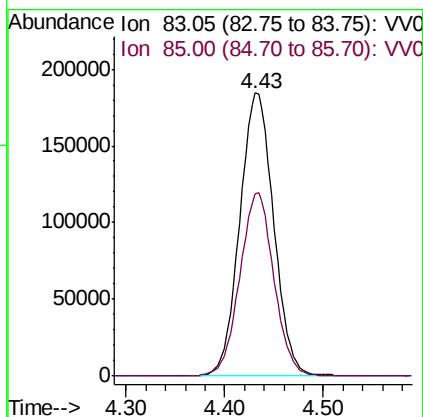
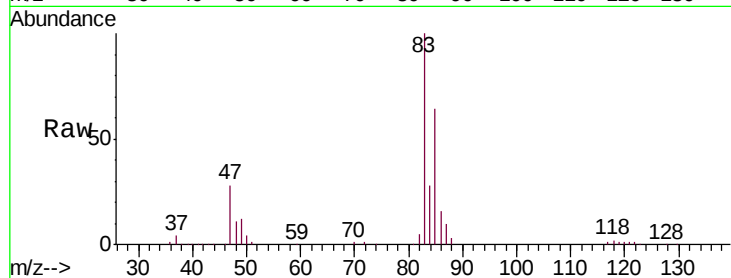




#25  
Chloroform  
Concen: 20.786 ug/L  
RT: 4.43 min Scan# 1039  
Delta R.T. 0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

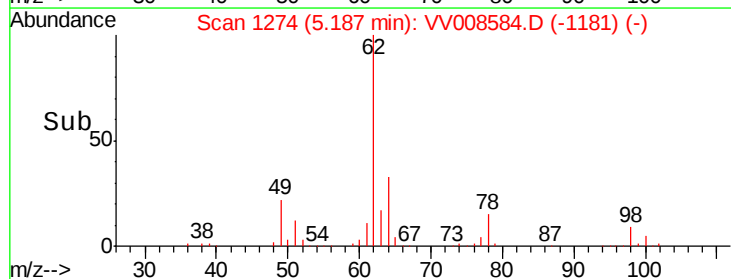
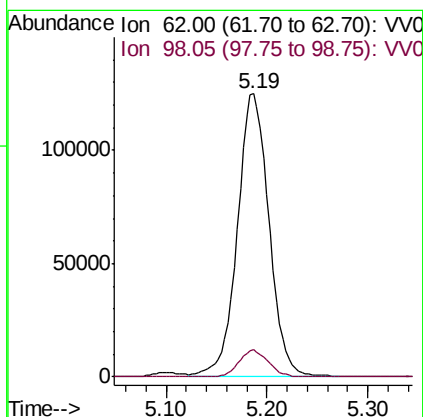
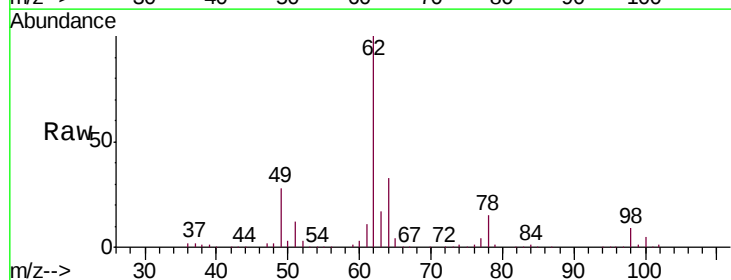
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02065

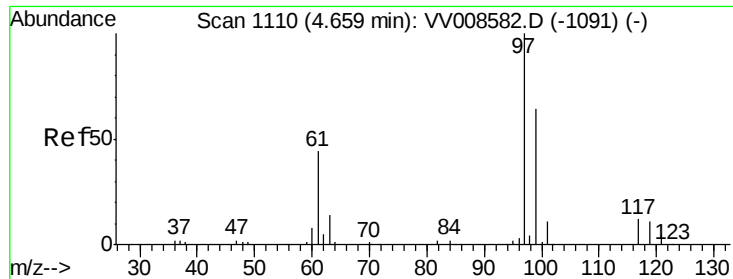
Tgt Ion: 83 Resp: 438259  
Ion Ratio Lower Upper  
83 100  
85 64.3 44.4 82.5



#27  
1,2-Dichloroethane  
Concen: 20.250 ug/L  
RT: 5.19 min Scan# 1274  
Delta R.T. 0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

Tgt Ion: 62 Resp: 269448  
Ion Ratio Lower Upper  
62 100  
98 9.5 7.1 10.7

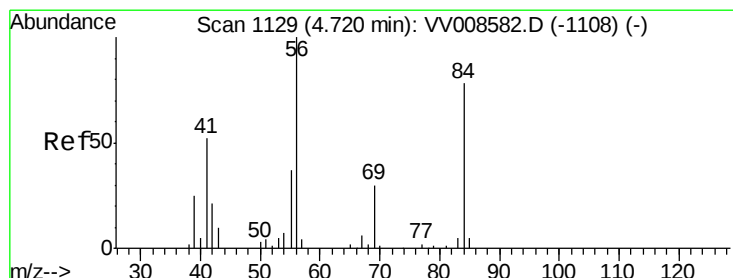
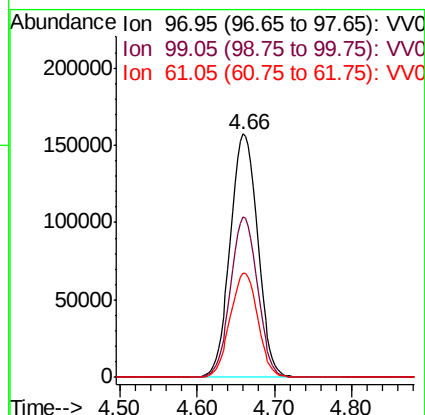
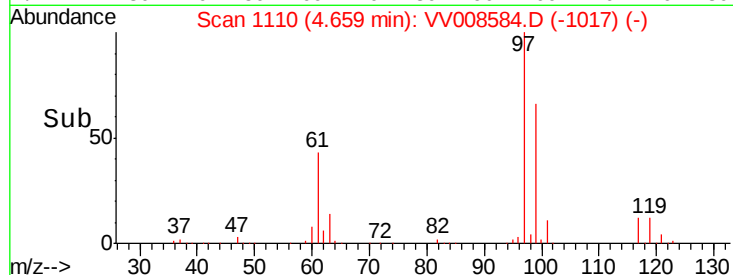
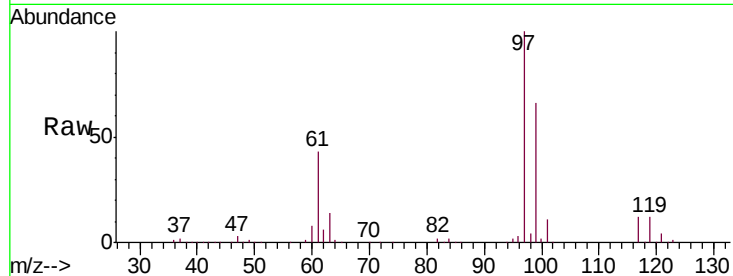




#29  
 1,1,1-Trichloroethane  
 Concen: 21.675 ug/L  
 RT: 4.66 min Scan# 1110  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

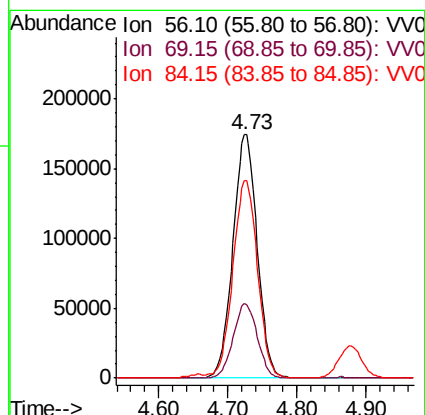
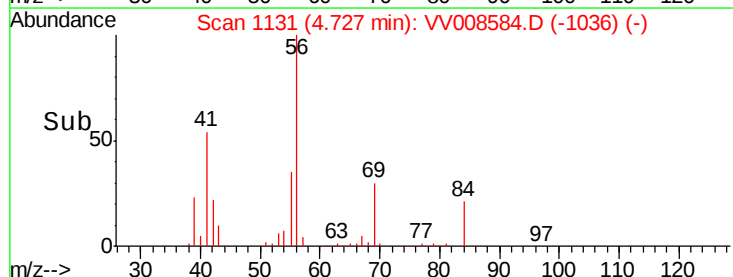
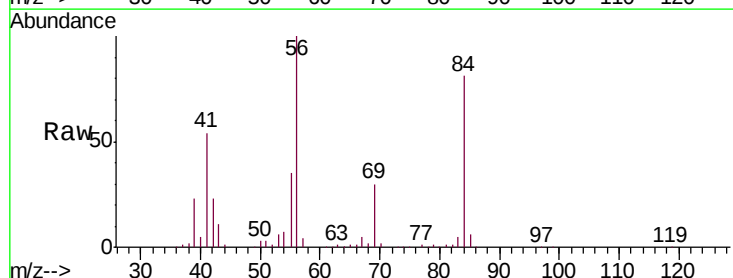
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

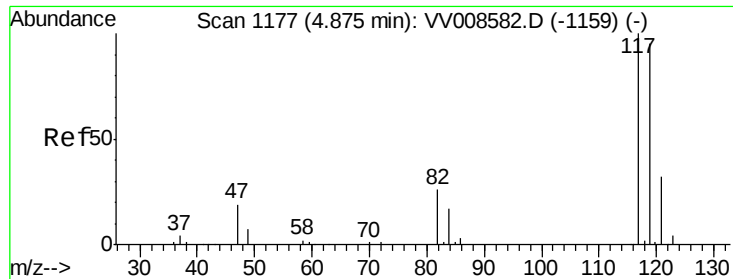
Tgt Ion: 97 Resp: 387530  
 Ion Ratio Lower Upper  
 97 100  
 99 64.9 51.0 76.4  
 61 42.8 34.3 51.5



#30  
 Cyclohexane  
 Concen: 21.444 ug/L  
 RT: 4.73 min Scan# 1131  
 Delta R.T. 0.01 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Tgt Ion: 56 Resp: 426872  
 Ion Ratio Lower Upper  
 56 100  
 69 30.5 24.2 36.4  
 84 82.2 65.7 98.5

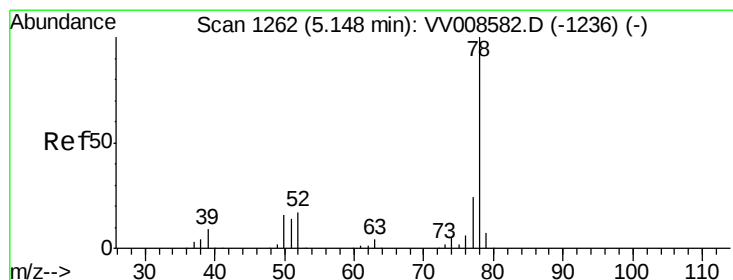
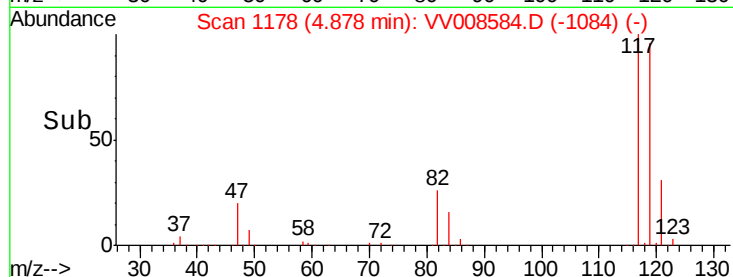
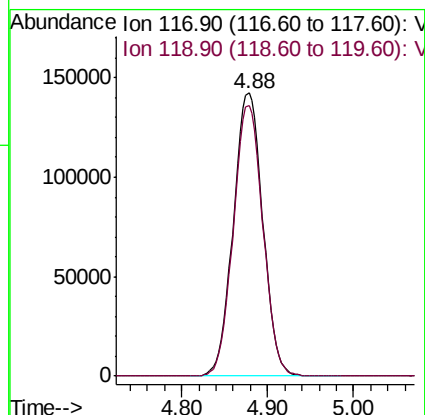
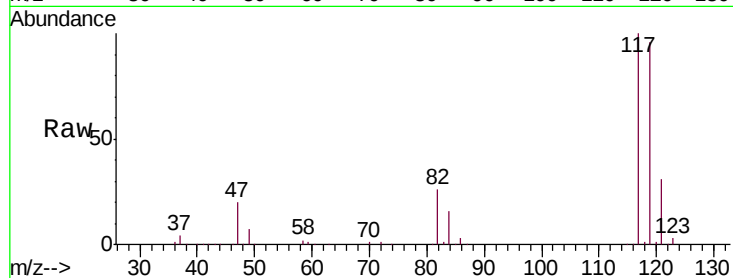




#31  
 Carbon tetrachloride  
 Concen: 21.824 ug/L  
 RT: 4.88 min Scan# 1178  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

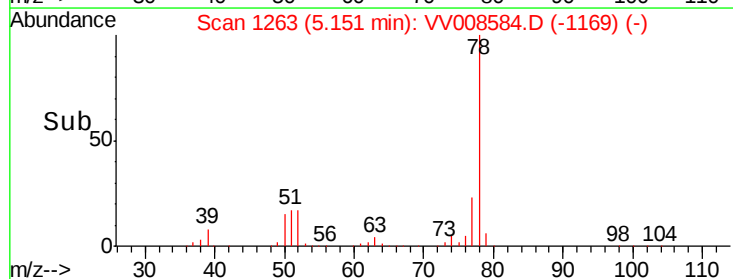
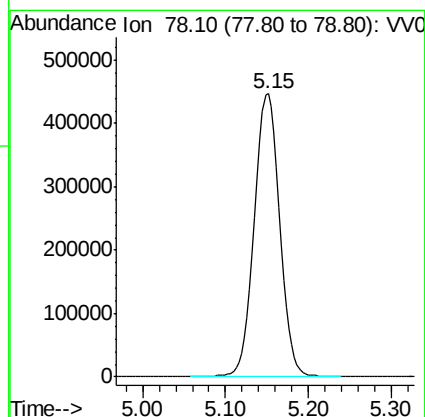
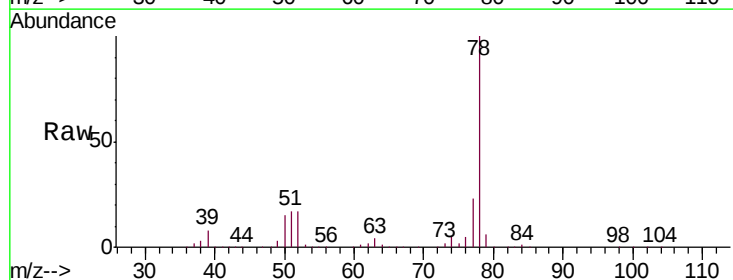
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

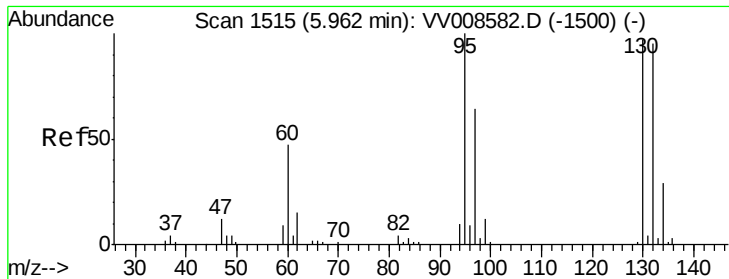
Tgt Ion:117 Resp: 338637  
 Ion Ratio Lower Upper  
 117 100  
 119 95.7 75.8 113.8



#33  
 Benzene  
 Concen: 21.516 ug/L  
 RT: 5.15 min Scan# 1263  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Tgt Ion: 78 Resp: 955096

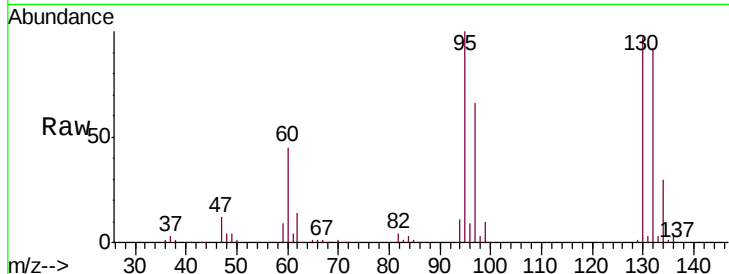




#34  
 Trichloroethene  
 Concen: 21.525 ug/L  
 RT: 5.96 min Scan# 1515  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 95    | Resp: | 255371 |
| Ion      | Ratio | Lower | Upper  |
| 95       | 100   |       |        |
| 97       | 65.5  | 45.1  | 83.7   |
| 132      | 92.0  | 66.3  | 123.1  |
| 130      | 97.1  | 68.0  | 126.4  |



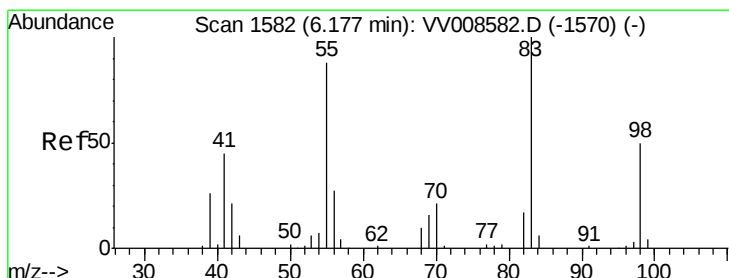
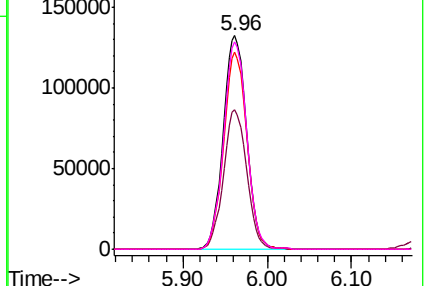
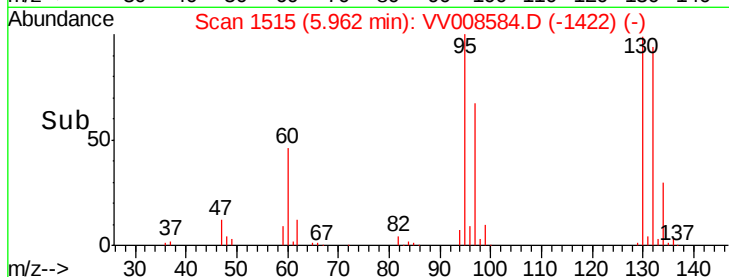
Abundance

Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

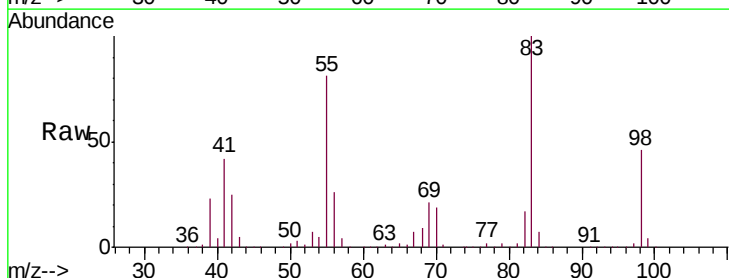
Ion 131.95 (131.65 to 132.65): V

Ion 129.95 (129.65 to 130.65): V



#35  
 Methylcyclohexane  
 Concen: 22.341 ug/L  
 RT: 6.18 min Scan# 1582  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 83    | Resp: | 437535 |
| Ion      | Ratio | Lower | Upper  |
| 83       | 100   |       |        |
| 55       | 81.1  | 65.6  | 98.4   |
| 98       | 46.1  | 36.4  | 54.6   |

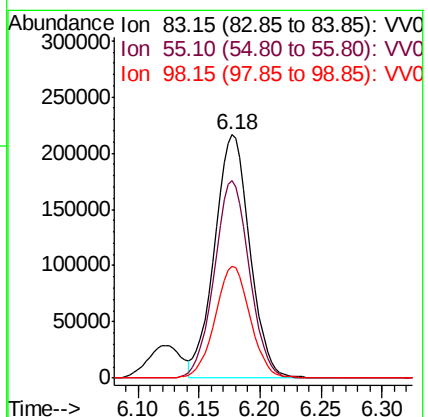
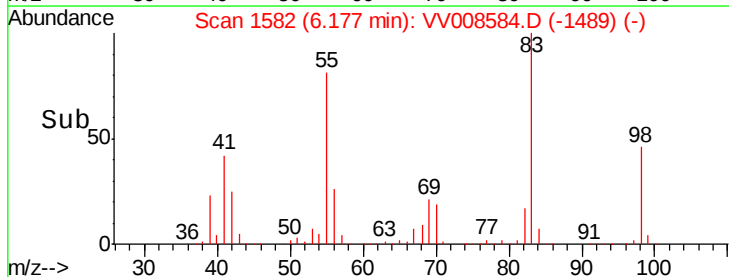


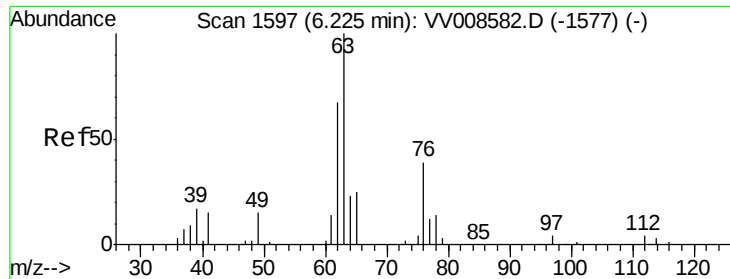
Abundance

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

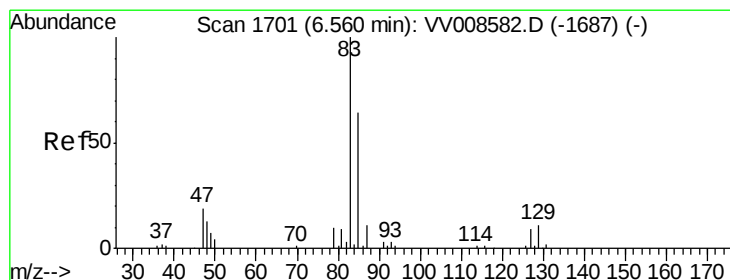
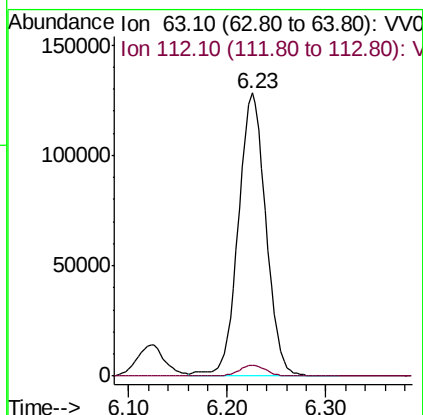
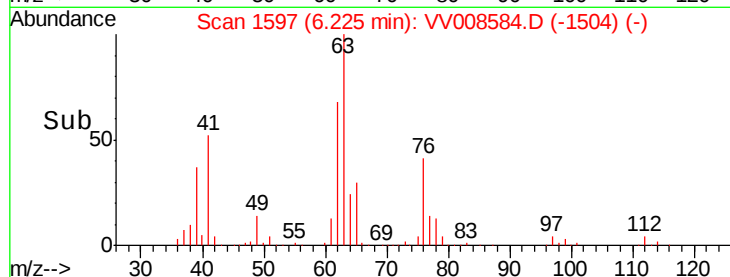
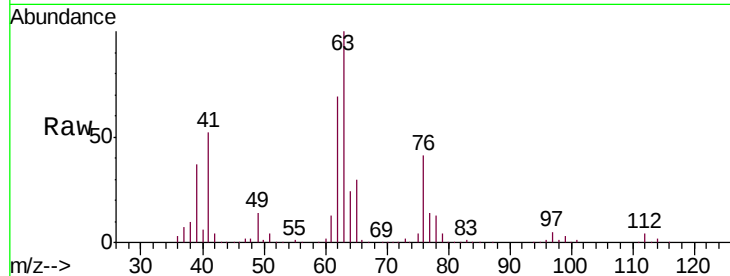




#37  
 1,2-Dichloropropane  
 Concen: 20.750 ug/L  
 RT: 6.23 min Scan# 1597  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

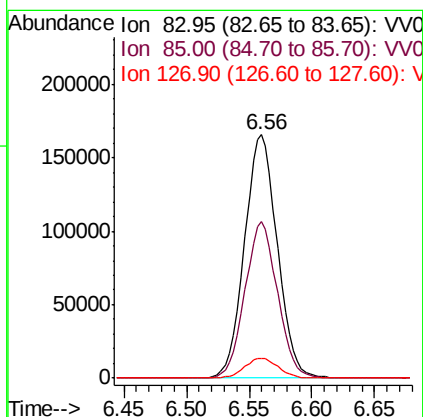
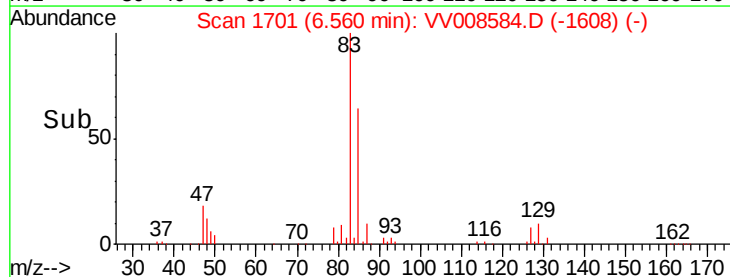
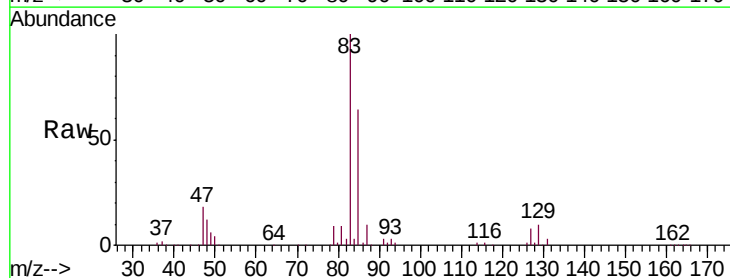
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

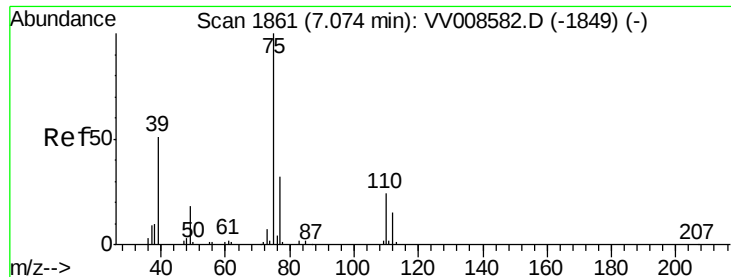
Tgt Ion: 63 Resp: 247543  
 Ion Ratio Lower Upper  
 63 100  
 112 3.8 2.8 4.2



#38  
 Bromodichloromethane  
 Concen: 21.605 ug/L  
 RT: 6.56 min Scan# 1701  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Tgt Ion: 83 Resp: 301814  
 Ion Ratio Lower Upper  
 83 100  
 85 64.4 44.9 83.5  
 127 8.2 6.9 10.3

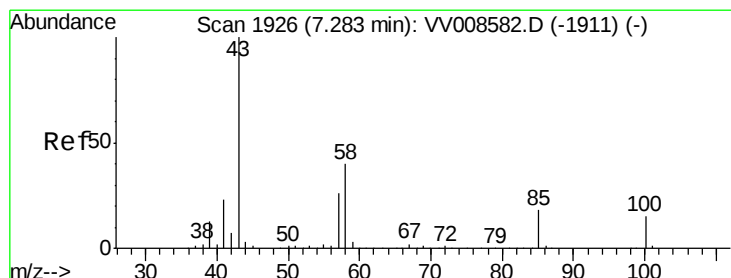
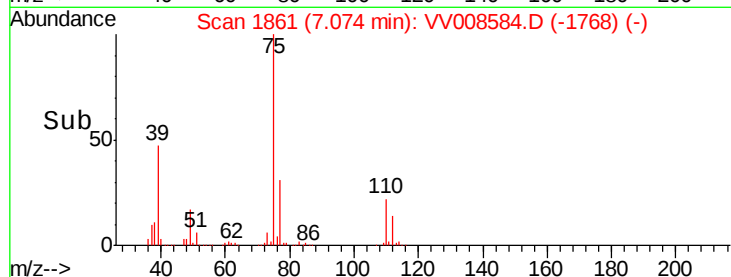
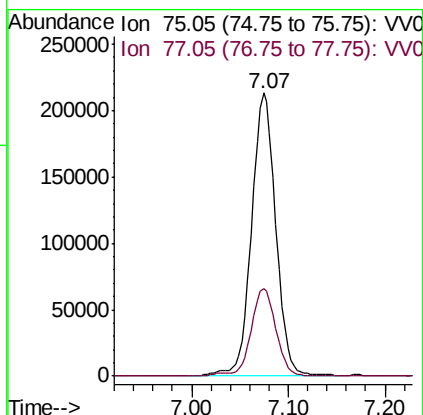
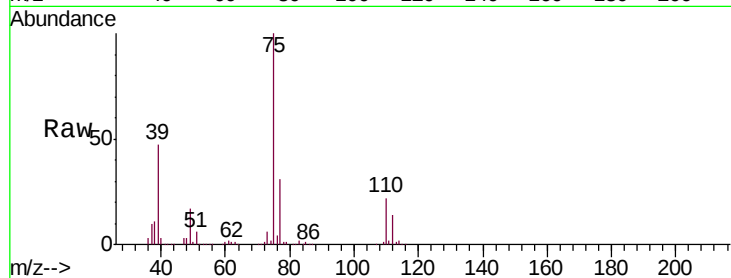




#39  
 cis-1,3-Dichloropropene  
 Concen: 23.095 ug/L  
 RT: 7.07 min Scan# 1861  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

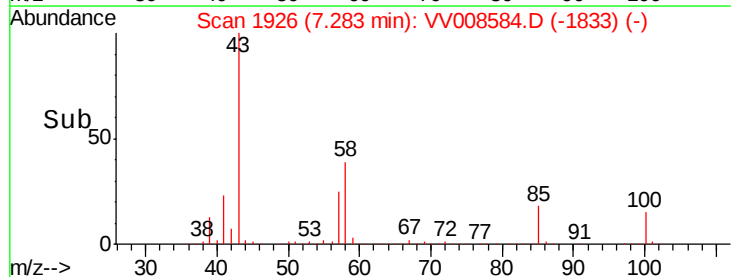
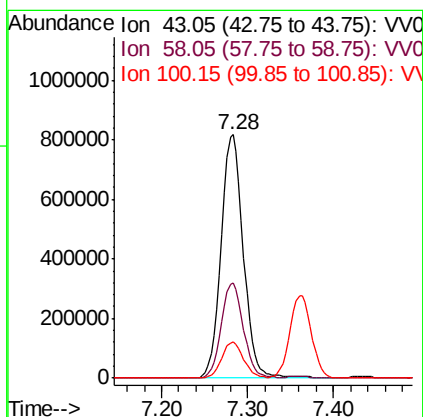
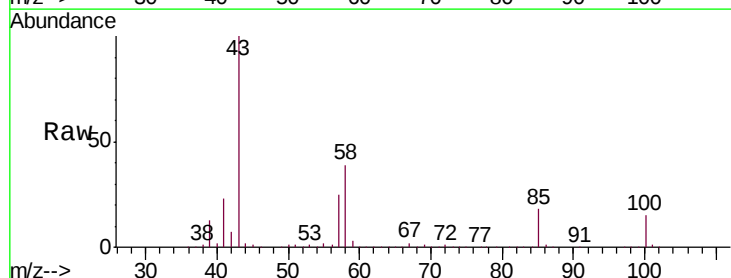
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

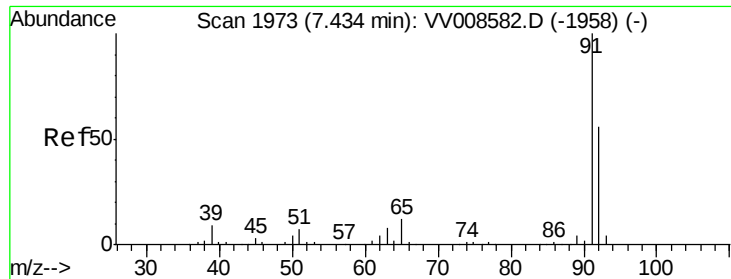
Tgt Ion: 75 Resp: 371926  
 Ion Ratio Lower Upper  
 75 100  
 77 31.1 23.0 42.8



#40  
 4-Methyl-2-pentanone  
 Concen: 208.758 ug/L  
 RT: 7.28 min Scan# 1926  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Tgt Ion: 43 Resp: 1475744  
 Ion Ratio Lower Upper  
 43 100  
 58 38.7 31.0 46.4  
 100 14.5 11.1 16.7





#42

Toluene

Concen: 21.624 ug/L

RT: 7.43 min Scan# 1973

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

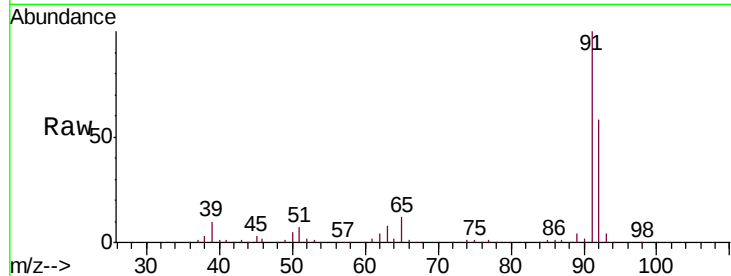
VSTD02065

Tgt Ion: 91 Resp: 998584

Ion Ratio Lower Upper

91 100

92 58.5 39.1 72.5



Abundance Ion 91.15 (90.85 to 91.85): VV008582.D (-1958) (-)

Ion 92.15 (91.85 to 92.85): VV008584.D (-1880) (-)

7.43

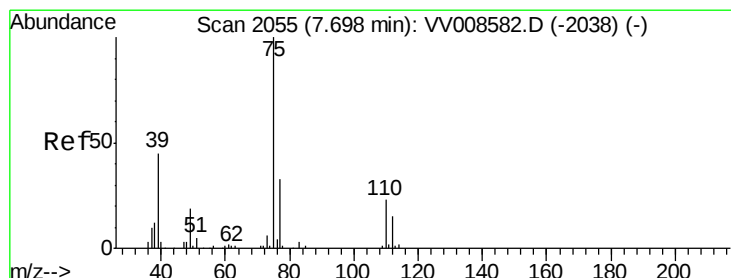
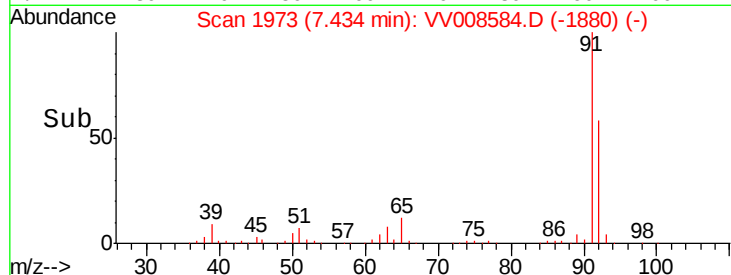
600000

400000

200000

0

Time-->



#44

trans-1,3-Dichloropropene

Concen: 23.300 ug/L

RT: 7.70 min Scan# 2055

Delta R.T. 0.00 min

Lab File: VV008584.D

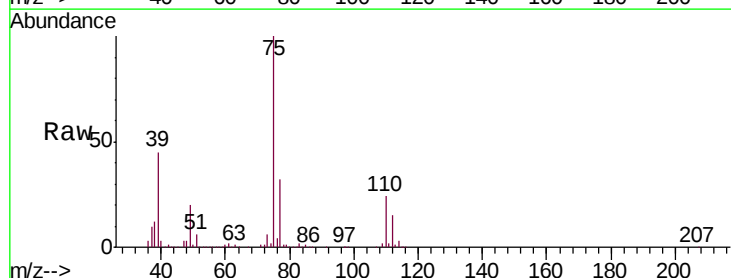
Acq: 16 Nov 2018 16:31

Tgt Ion: 75 Resp: 301448

Ion Ratio Lower Upper

75 100

77 32.3 23.0 42.6



Abundance Ion 75.05 (74.75 to 75.75): VV008582.D (-2038) (-)

Ion 77.05 (76.75 to 77.75): VV008584.D (-1962) (-)

7.70

200000

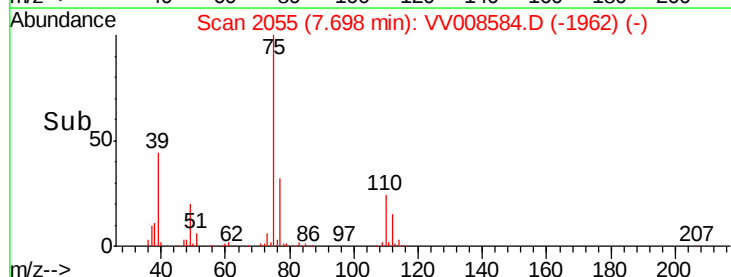
150000

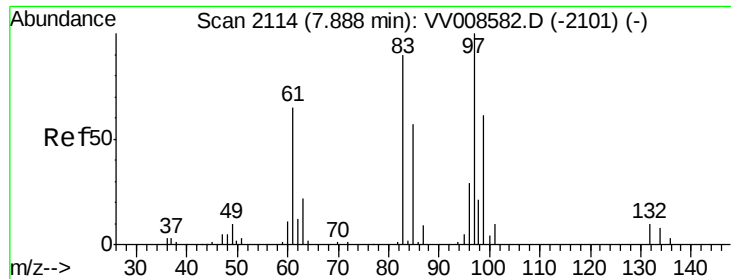
100000

50000

0

Time-->

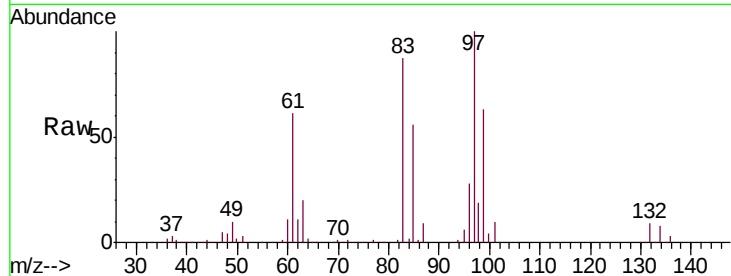




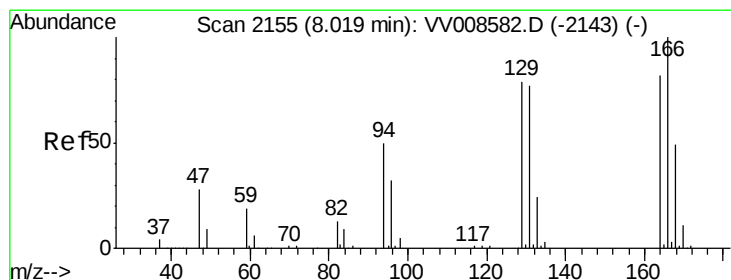
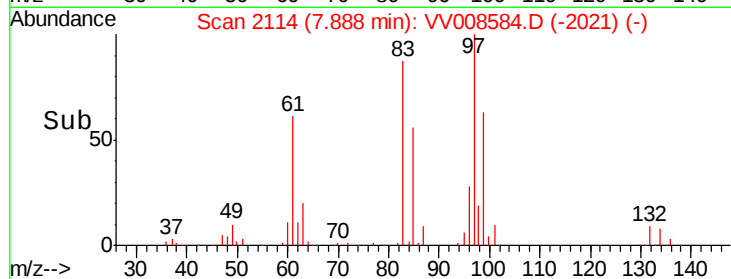
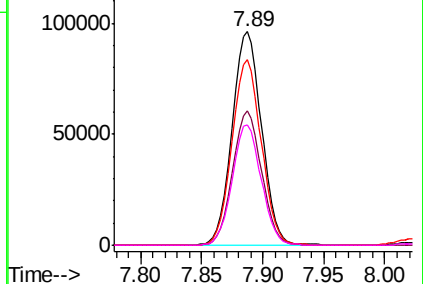
#45  
 1,1,2-Trichloroethane  
 Concen: 21.484 ug/L  
 RT: 7.89 min Scan# 2114  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Instrument :  
 MSVOA\_V  
 ClientSampleID :  
 VSTD02065

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 160553 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 62.7  | 43.0  | 79.8   |
| 83       | 86.8  | 63.0  | 117.0  |
| 85       | 56.5  | 40.1  | 74.5   |

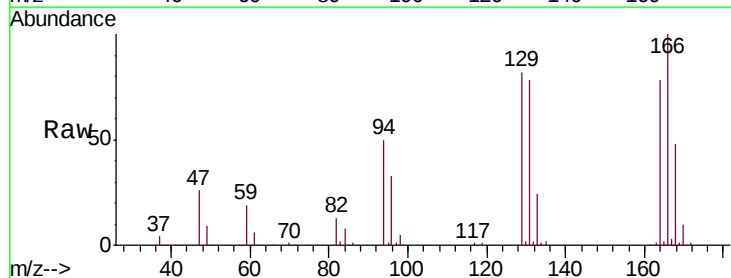


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 82.95 (82.65 to 83.65): VV0  
 Ion 85.00 (84.70 to 85.70): VV0

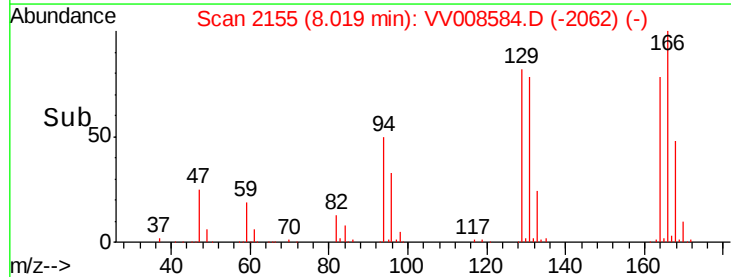
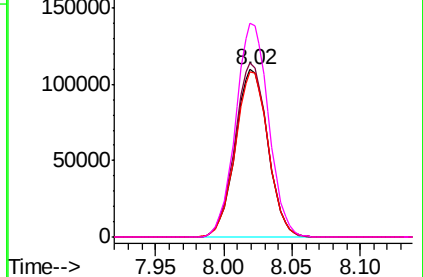


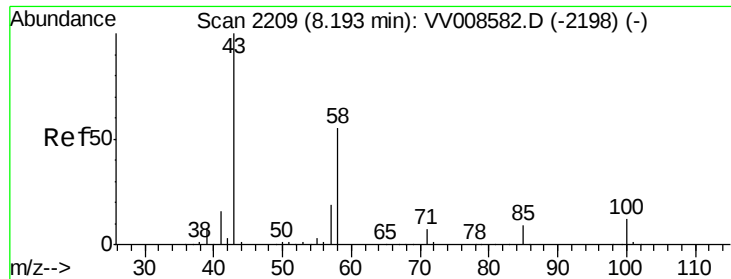
#47  
 Tetrachloroethene  
 Concen: 21.310 ug/L  
 RT: 8.02 min Scan# 2155  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 183098 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 104.5 | 67.5  | 125.4  |
| 131      | 99.1  | 66.4  | 123.4  |
| 166      | 127.7 | 85.8  | 159.3  |



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

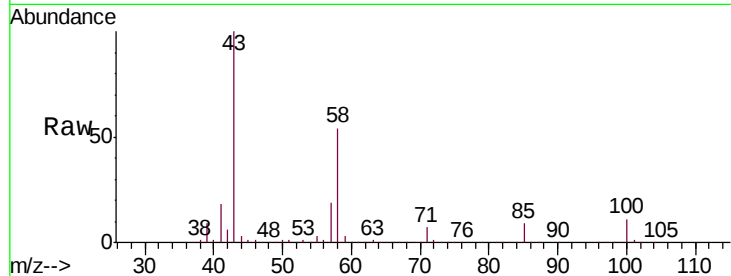




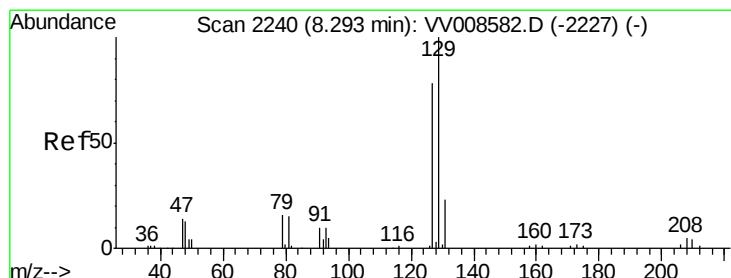
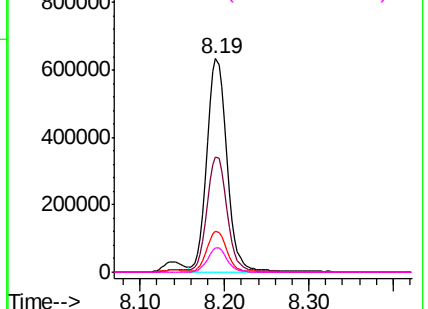
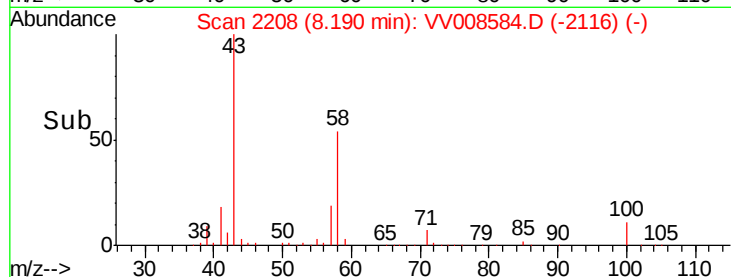
#48  
2-Hexanone  
Concen: 218.016 ug/L  
RT: 8.19 min Scan# 2208  
Delta R.T. -0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02065

Tgt Ion: 43 Resp: 1051796  
Ion Ratio Lower Upper  
43 100  
58 54.4 41.8 62.8  
57 19.3 15.4 23.0  
100 11.3 8.7 13.1

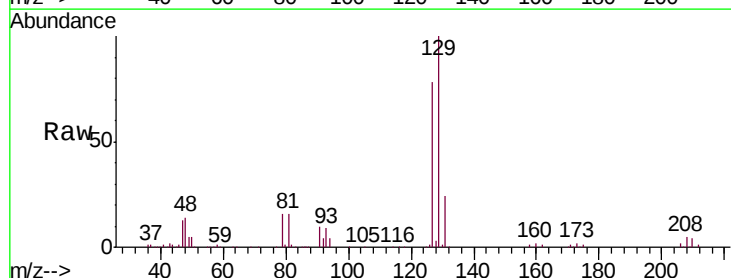


Abundance Ion 43.05 (42.75 to 43.75): VV0  
Ion 58.05 (57.75 to 58.75): VV0  
Ion 57.20 (56.90 to 57.90): VV0  
Ion 100.15 (99.85 to 100.85): VV0

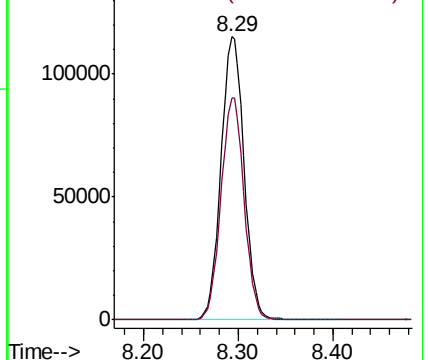
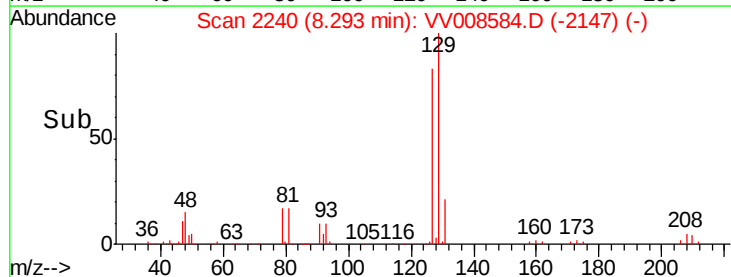


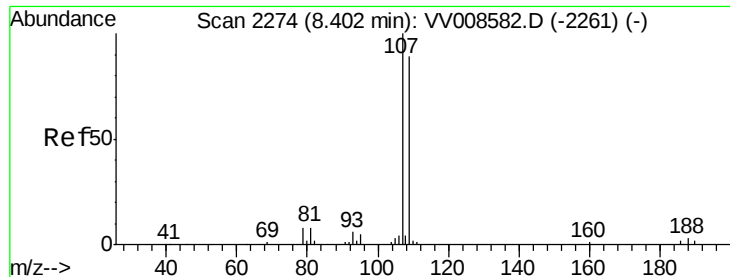
#49  
Dibromochloromethane  
Concen: 22.621 ug/L  
RT: 8.29 min Scan# 2240  
Delta R.T. 0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

Tgt Ion: 129 Resp: 195018  
Ion Ratio Lower Upper  
129 100  
127 78.5 54.6 101.4



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

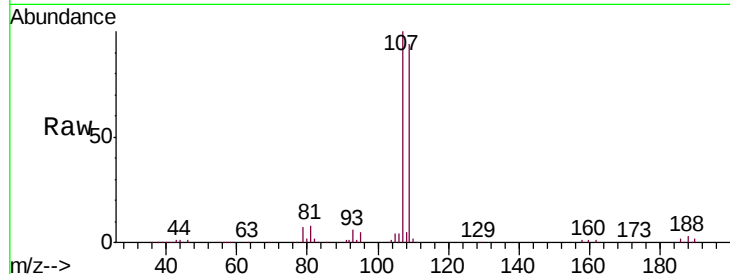




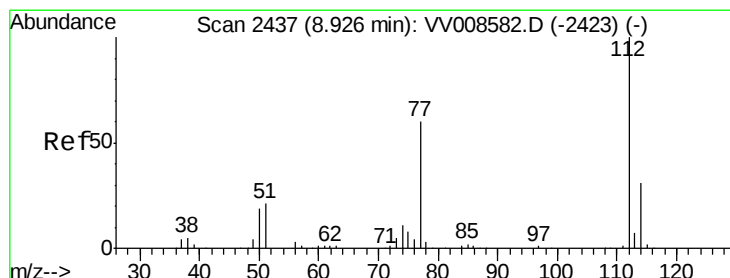
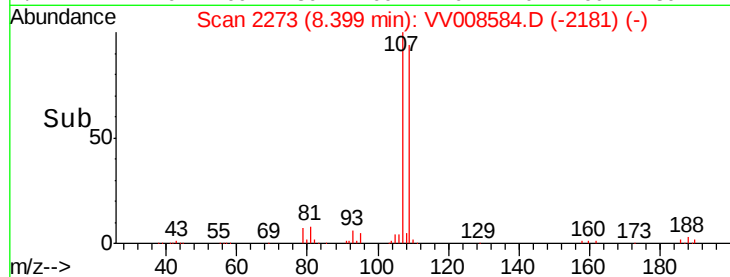
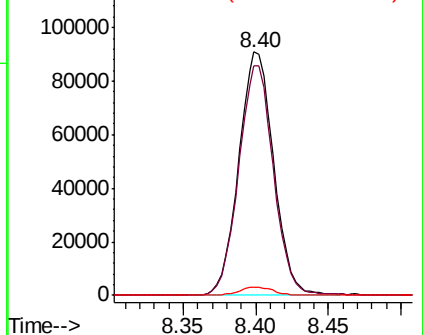
#50  
1,2-Dibromoethane  
Concen: 21.741 ug/L  
RT: 8.40 min Scan# 2273  
Delta R.T. -0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02065

Tgt Ion:107 Resp: 151968  
Ion Ratio Lower Upper  
107 100  
109 94.5 62.1 115.3  
188 3.3 2.2 3.4

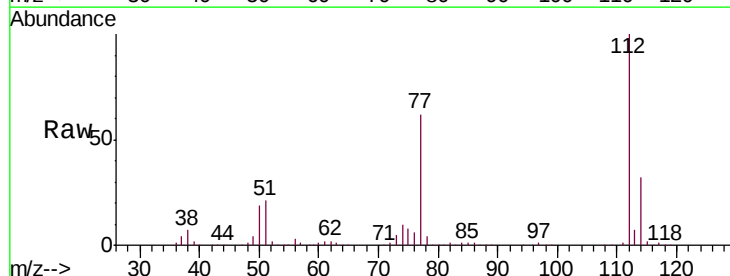


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

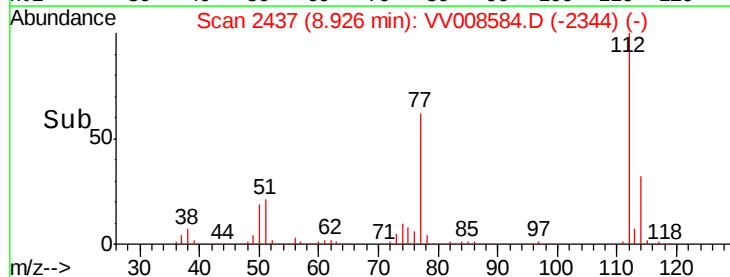
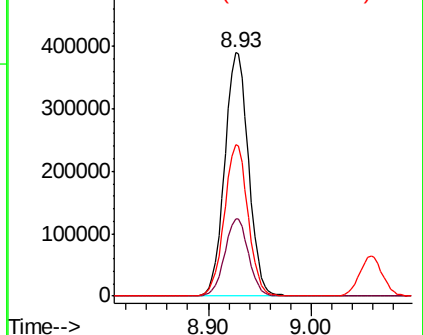


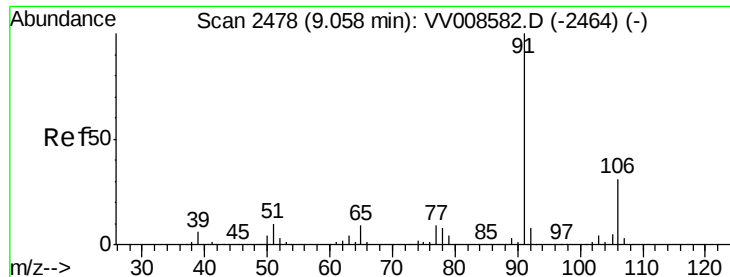
#51  
Chlorobenzene  
Concen: 22.176 ug/L  
RT: 8.93 min Scan# 2437  
Delta R.T. 0.00 min  
Lab File: VV008584.D  
Acq: 16 Nov 2018 16:31

Tgt Ion:112 Resp: 627859  
Ion Ratio Lower Upper  
112 100  
114 31.8 21.9 40.7  
77 62.4 47.9 71.9



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): V





#52

Ethylbenzene

Concen: 22.112 ug/L

RT: 9.06 min Scan# 2478

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

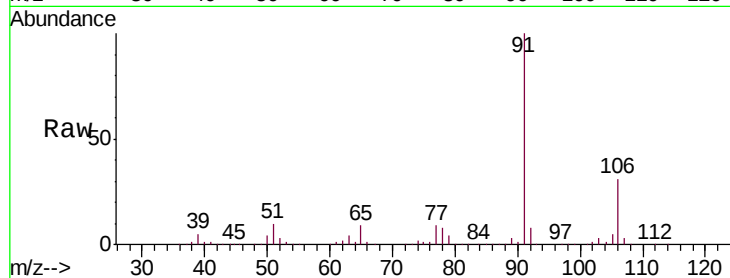
VSTD02065

Tgt Ion: 91 Resp: 1130977

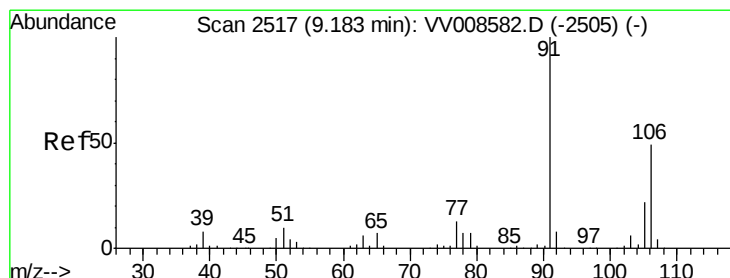
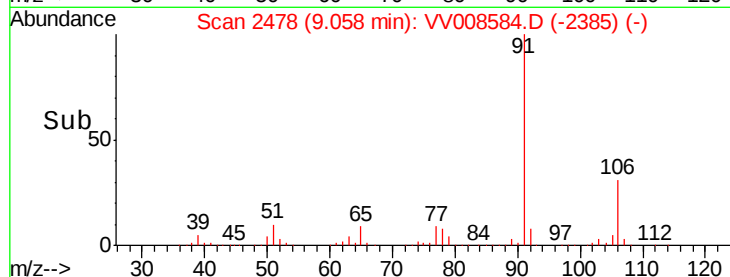
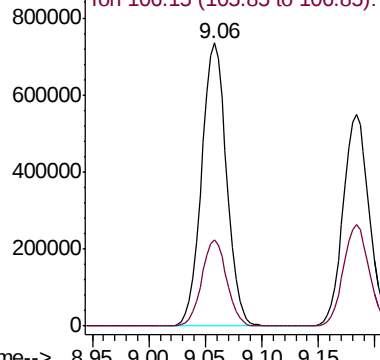
Ion Ratio Lower Upper

91 100

106 30.6 21.3 39.6



Abundance Ion 91.15 (90.85 to 91.85): VV008584.D (-2464) (-)



#53

m,p-xylene

Concen: 22.427 ug/L

RT: 9.18 min Scan# 2517

Delta R.T. 0.00 min

Lab File: VV008584.D

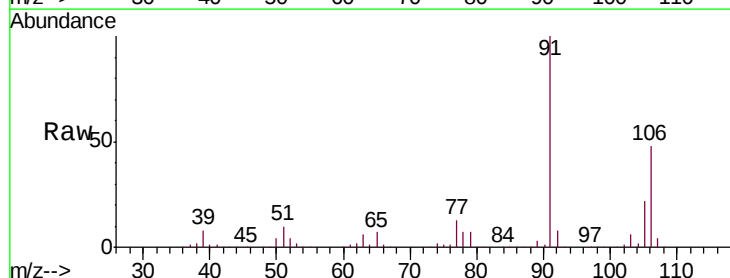
Acq: 16 Nov 2018 16:31

Tgt Ion: 106 Resp: 419117

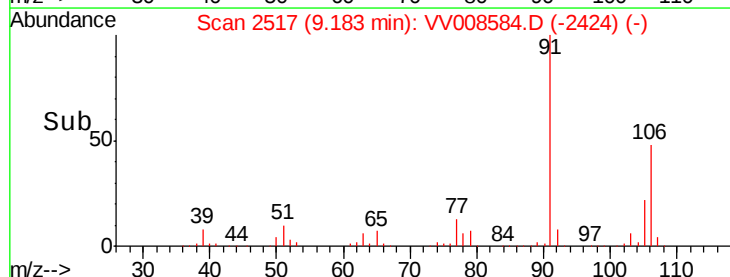
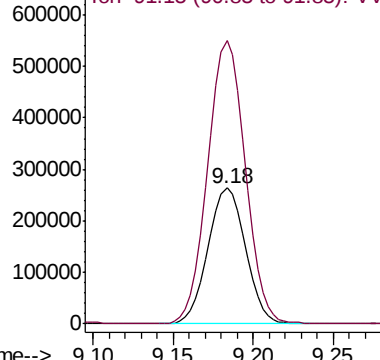
Ion Ratio Lower Upper

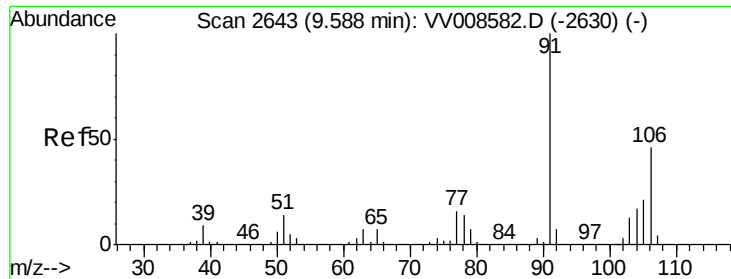
106 100

91 208.6 144.0 267.4



Abundance Ion 106.15 (105.85 to 106.85): VV008584.D (-2505) (-)





#54

o-xylene

Concen: 22.432 ug/L

RT: 9.59 min Scan# 2643

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

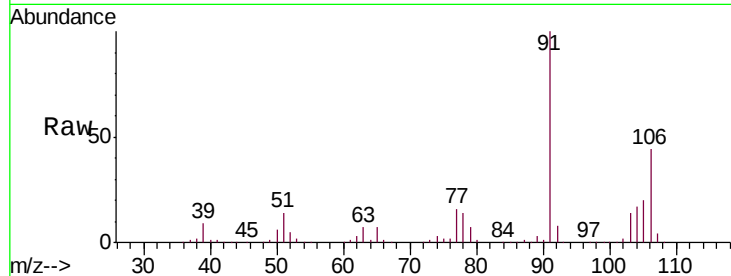
VSTD02065

Tgt Ion:106 Resp: 402957

Ion Ratio Lower Upper

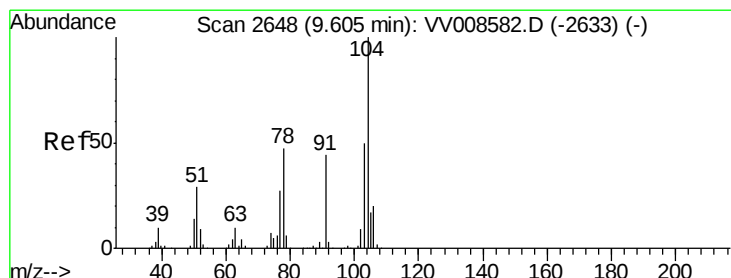
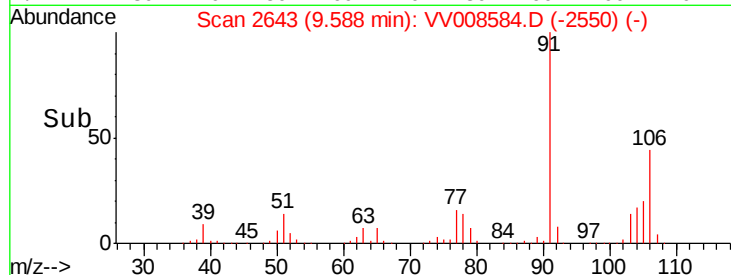
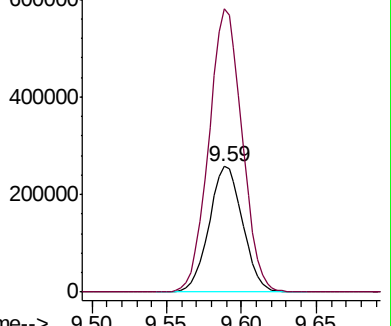
106 100

91 225.4 152.9 284.1



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 22.944 ug/L

RT: 9.61 min Scan# 2649

Delta R.T. 0.00 min

Lab File: VV008584.D

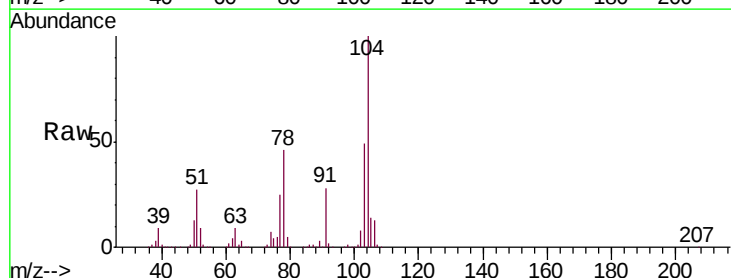
Acq: 16 Nov 2018 16:31

Tgt Ion:104 Resp: 686838

Ion Ratio Lower Upper

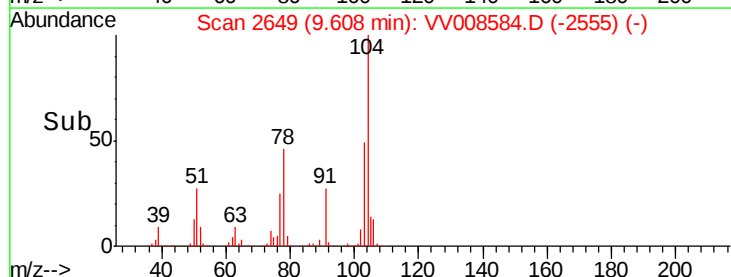
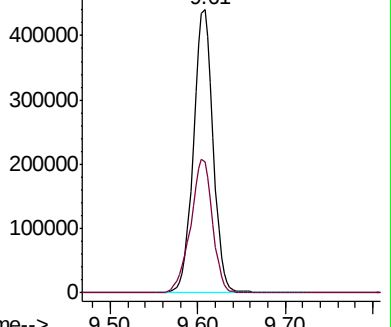
104 100

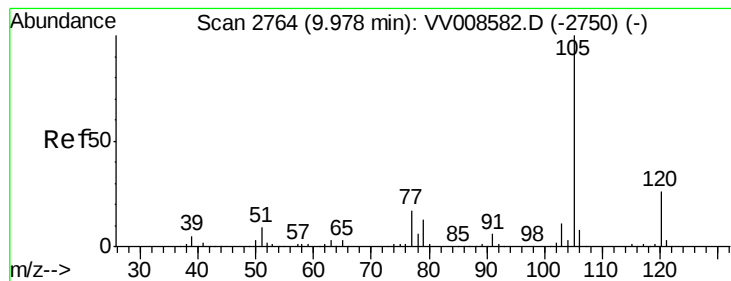
78 46.3 32.9 61.1



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0





#56

Isopropylbenzene

Concen: 22.765 ug/L

RT: 9.98 min Scan# 2764

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02065

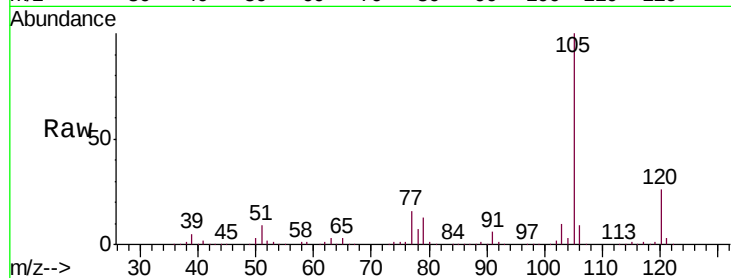
Tgt Ion:105 Resp: 1109518

Ion Ratio Lower Upper

105 100

120 26.1 21.0 31.6

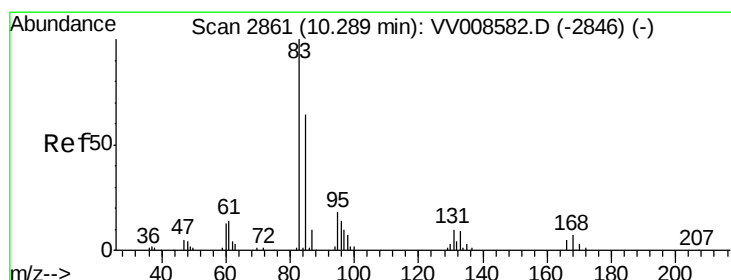
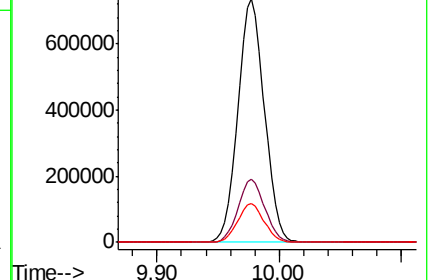
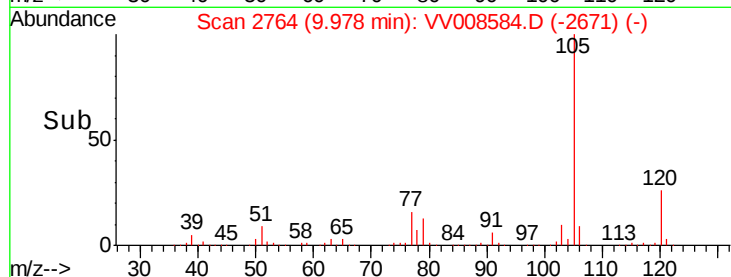
77 15.9 13.0 19.4



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#58

1,1,2,2-Tetrachloroethane

Concen: 21.945 ug/L

RT: 10.29 min Scan# 2861

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

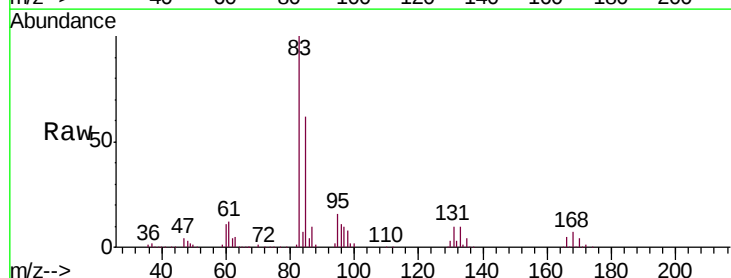
Tgt Ion: 83 Resp: 195200

Ion Ratio Lower Upper

83 100

85 62.3 44.8 83.2

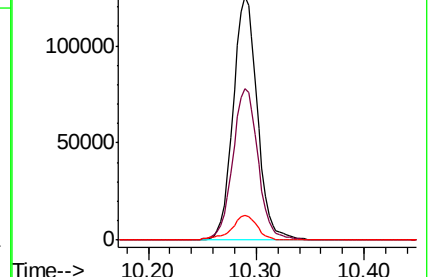
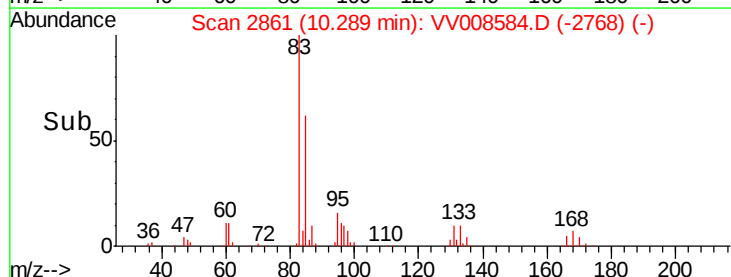
131 10.3 8.1 12.1

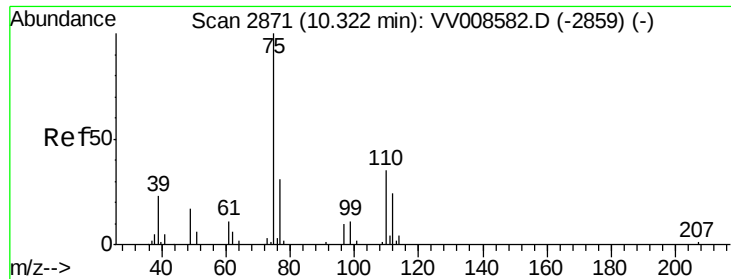


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 130.95 (130.65 to 131.65): V

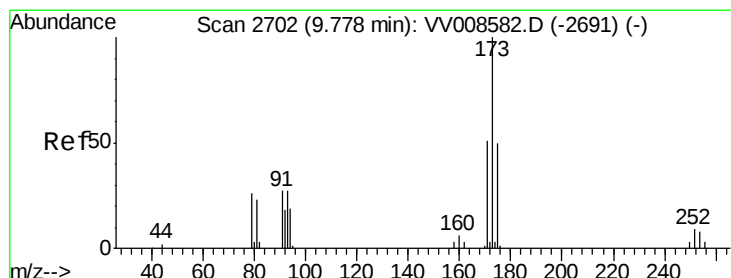
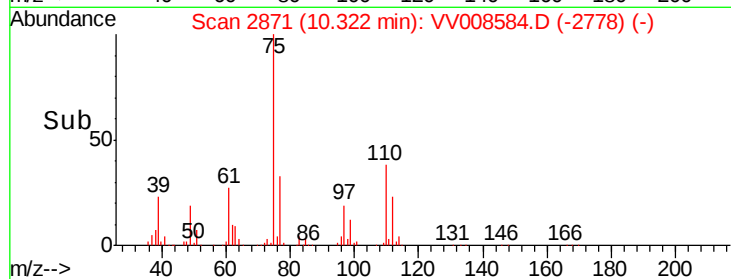
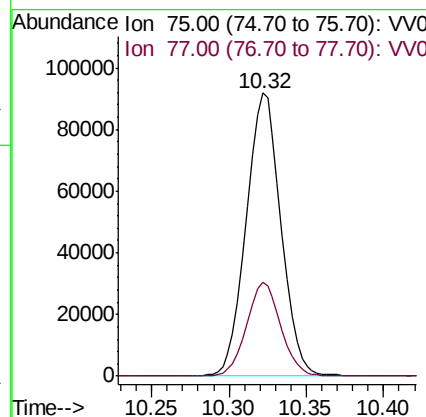
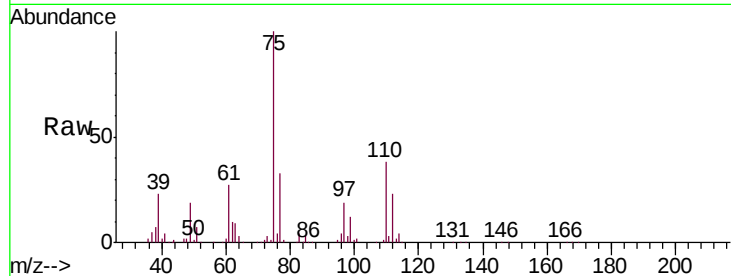




#59  
 1,2,3-Trichloropropane  
 Concen: 21.222 ug/L  
 RT: 10.32 min Scan# 2871  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

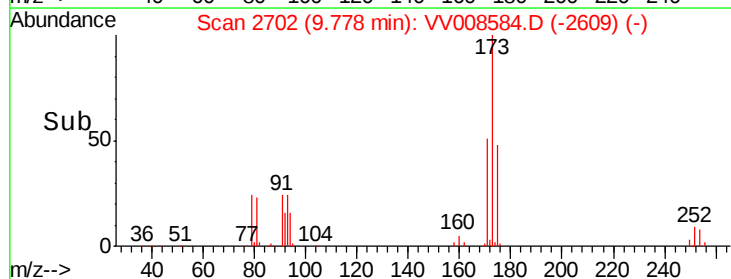
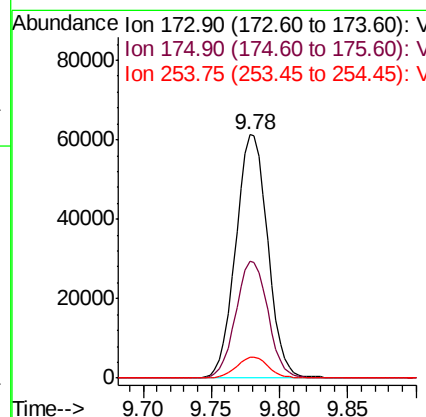
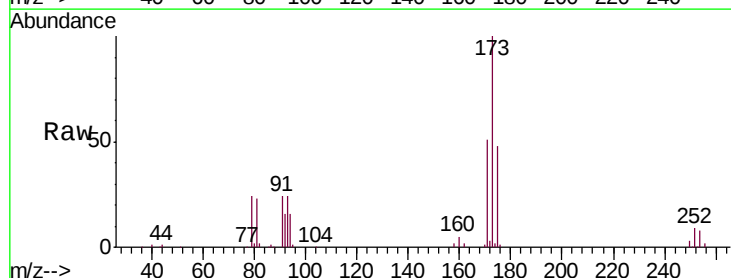
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

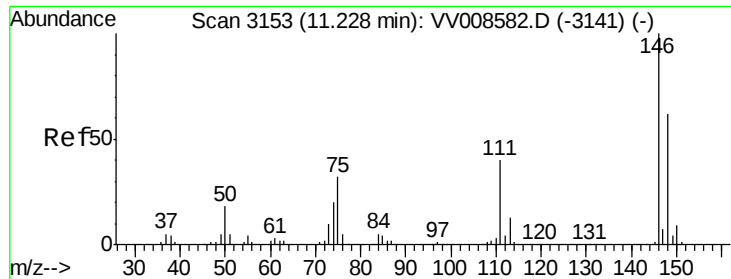
Tgt Ion: 75 Resp: 143689  
 Ion Ratio Lower Upper  
 75 100  
 77 32.5 25.2 37.8



#61  
 Bromoform  
 Concen: 21.898 ug/L  
 RT: 9.78 min Scan# 2702  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Tgt Ion: 173 Resp: 99720  
 Ion Ratio Lower Upper  
 173 100  
 175 48.2 39.6 59.4  
 254 8.6 6.2 9.4





#62

1,3-Dichlorobenzene

Concen: 20.734 ug/L

RT: 11.23 min Scan# 3153

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02065

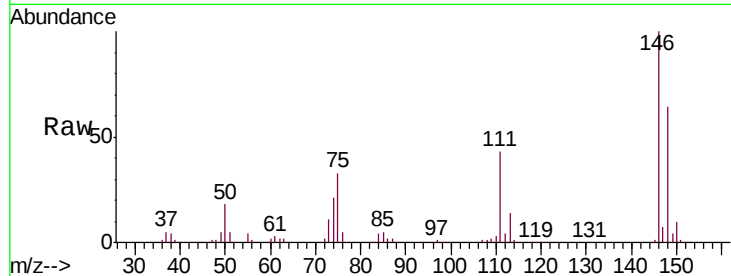
Tgt Ion:146 Resp: 476623

Ion Ratio Lower Upper

146 100

111 42.7 28.1 52.1

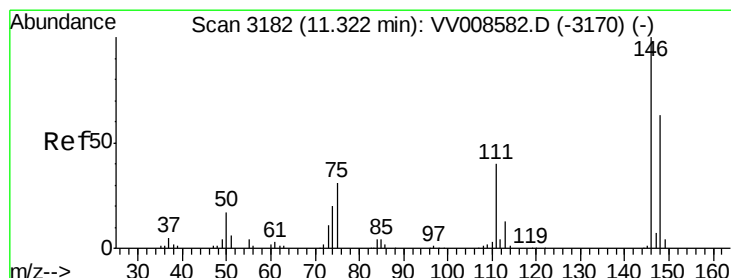
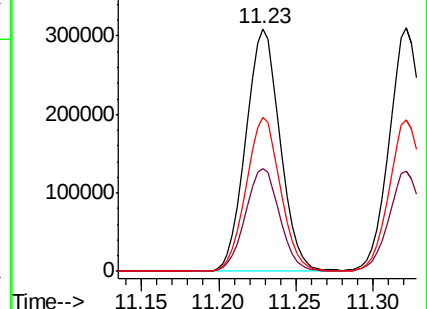
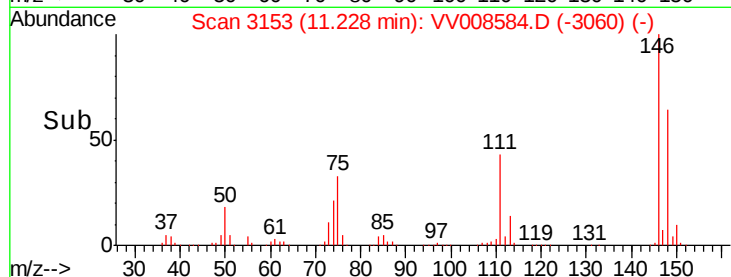
148 63.8 43.0 80.0



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#63

1,4-Dichlorobenzene

Concen: 21.209 ug/L

RT: 11.32 min Scan# 3182

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

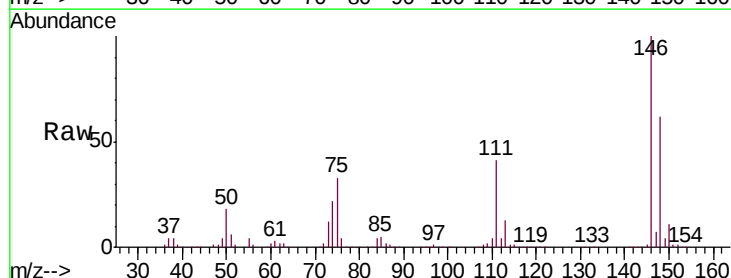
Tgt Ion:146 Resp: 476342

Ion Ratio Lower Upper

146 100

111 41.2 28.2 52.4

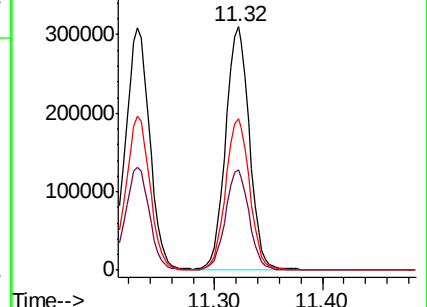
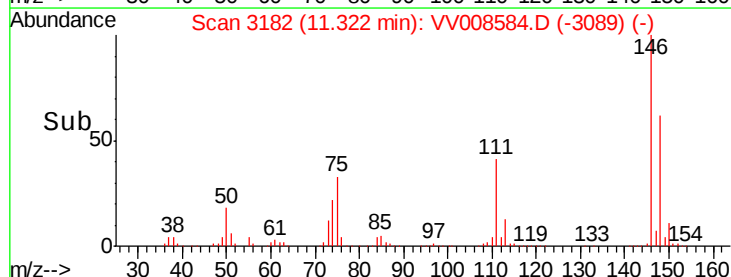
148 62.4 44.1 81.9

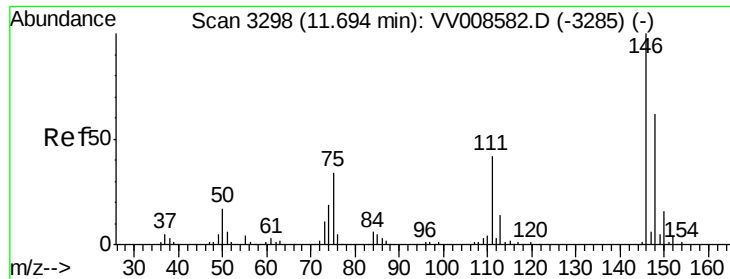


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V





#65

1,2-Dichlorobenzene

Concen: 20.355 ug/L

RT: 11.69 min Scan# 3298

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02065

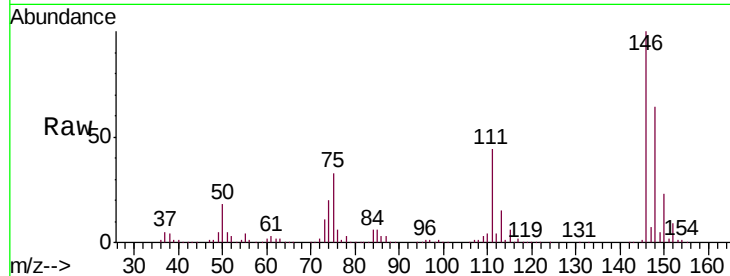
Tgt Ion:146 Resp: 438064

Ion Ratio Lower Upper

146 100

111 44.1 33.5 50.3

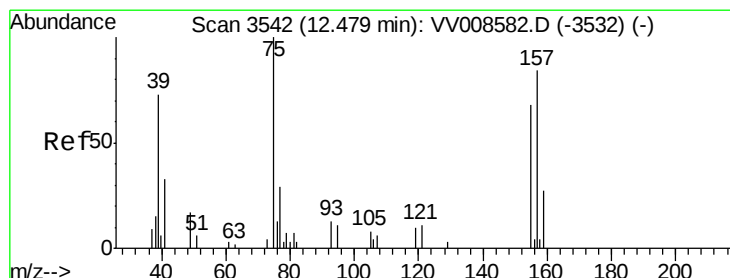
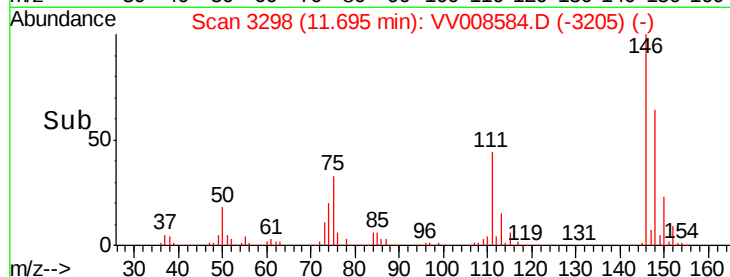
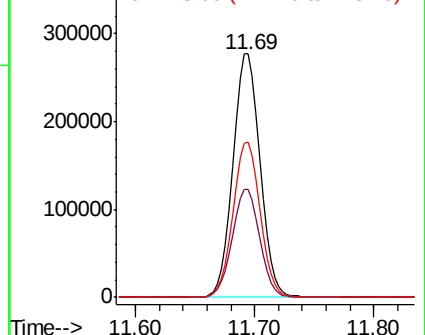
148 63.9 50.0 75.0



Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 20.018 ug/L

RT: 12.48 min Scan# 3542

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

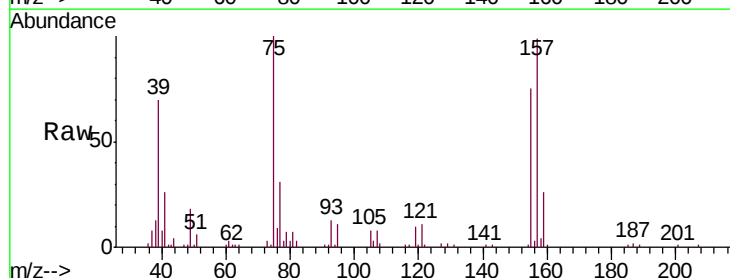
Tgt Ion: 75 Resp: 31906

Ion Ratio Lower Upper

75 100

155 75.4 54.2 81.2

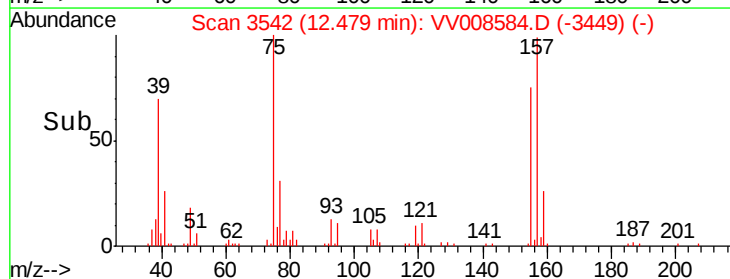
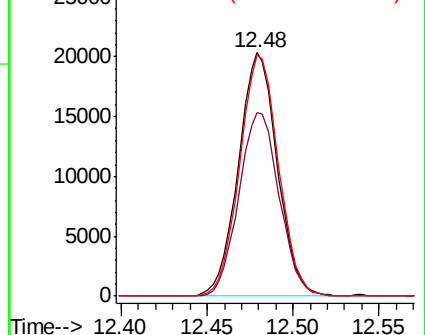
157 99.1 67.4 101.2

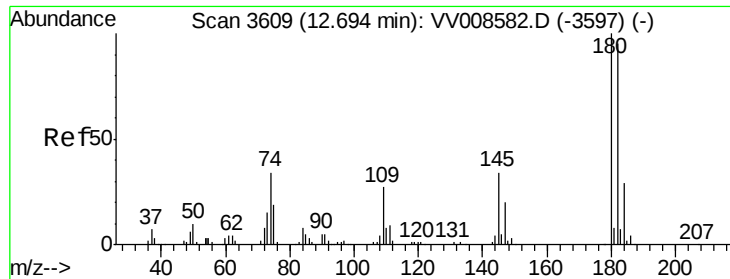


Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 154.95 (154.65 to 155.65): V

Ion 156.90 (156.60 to 157.60): V

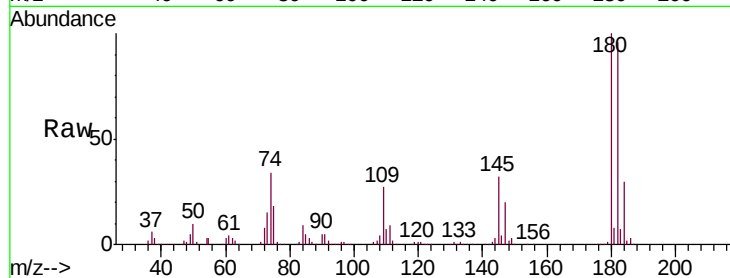




#67  
 1,3,5-Trichlorobenzene  
 Concen: 22.168 ug/L  
 RT: 12.69 min Scan# 3609  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02065

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 95.3  | 75.9  | 113.9 |
| 184     | 30.5  | 23.9  | 35.9  |
| 145     | 32.2  | 26.8  | 40.2  |



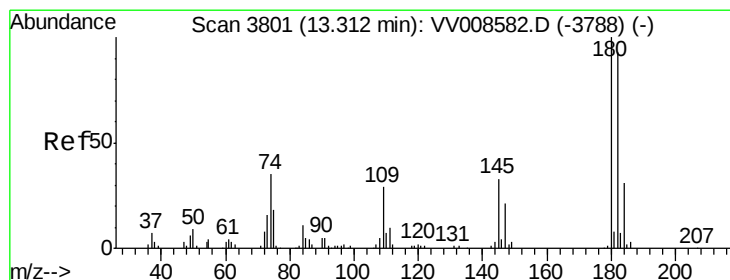
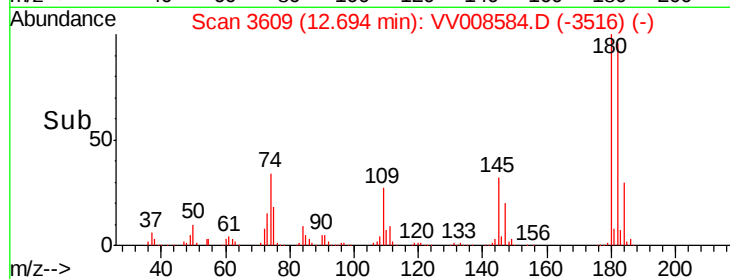
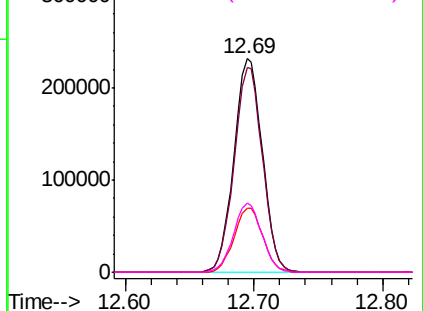
Abundance

Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

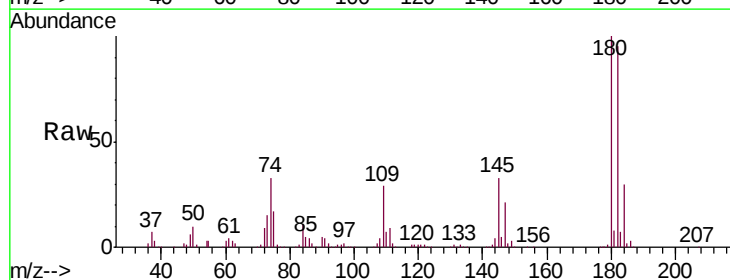
Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V



#68  
 1,2,4-trichlorobenzene  
 Concen: 24.350 ug/L  
 RT: 13.31 min Scan# 3801  
 Delta R.T. 0.00 min  
 Lab File: VV008584.D  
 Acq: 16 Nov 2018 16:31

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 94.7  | 76.4  | 114.6 |
| 145     | 32.5  | 27.1  | 40.7  |

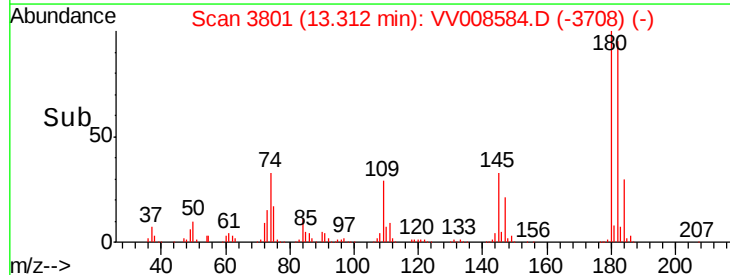
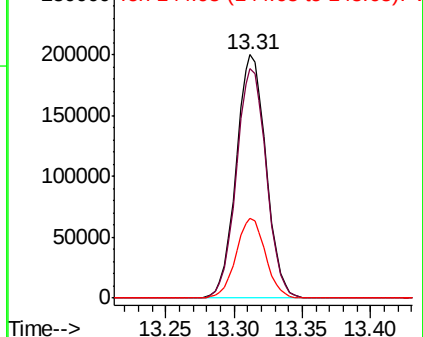


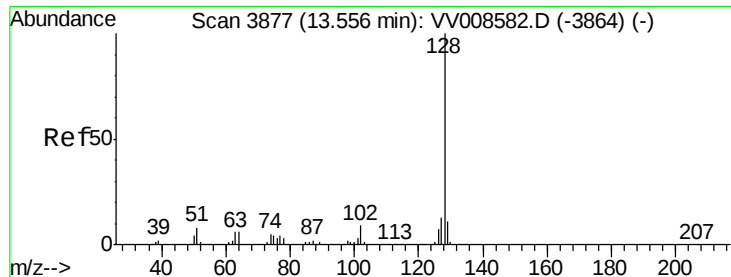
Abundance

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: 22.419 ug/L

RT: 13.55 min Scan# 3876

Delta R.T. -0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02065

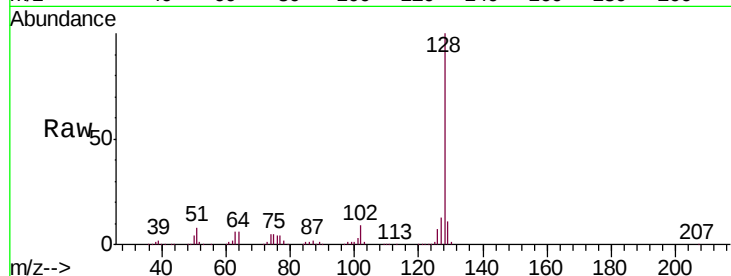
Tgt Ion:128 Resp: 499680

Ion Ratio Lower Upper

128 100

129 10.7 8.8 13.2

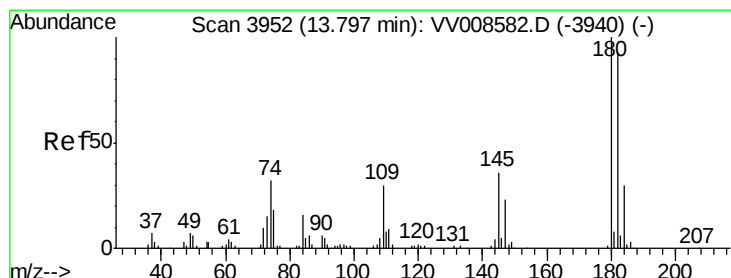
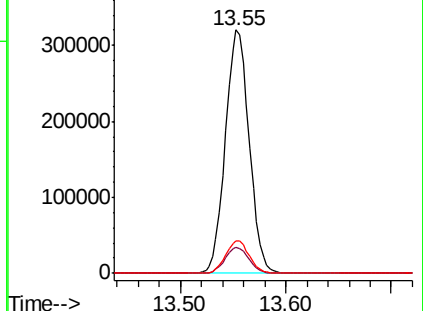
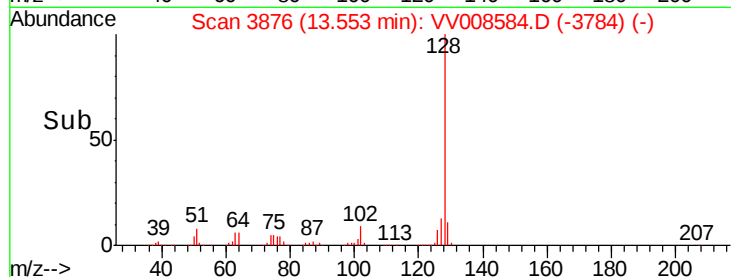
127 13.2 10.0 15.0



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: 22.688 ug/L

RT: 13.80 min Scan# 3952

Delta R.T. 0.00 min

Lab File: VV008584.D

Acq: 16 Nov 2018 16:31

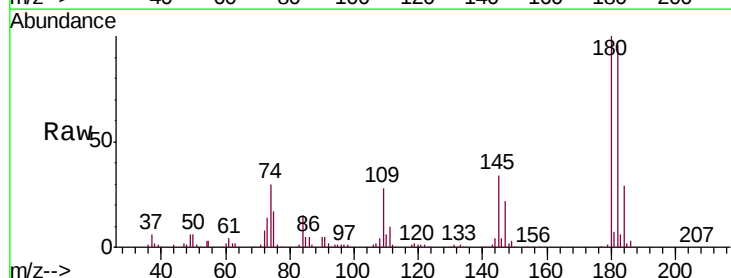
Tgt Ion:180 Resp: 272492

Ion Ratio Lower Upper

180 100

182 94.9 76.0 114.0

145 34.3 28.2 42.2



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

