

Data File : VV008839.D  
Acq On : 05 Dec 2018 11:49  
Operator : SY/MD  
Sample : VSTD02068  
Misc : 25.0 mL/MSVOA\_V/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

Quant Time: Dec 06 04:41:26 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR120518WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Dec 06 04:37:05 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 117086   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 110165   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 56515    | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |       |     |        |        |      |      |
|--------------------------------|-------|-----|--------|--------|------|------|
| 4) Vinyl Chloride-d3           | 1.32  | 65  | 123909 | 15.88  | ug/L | 0.00 |
| 7) Chloroethane-d5             | 1.59  | 69  | 94056  | 16.78  | ug/L | 0.00 |
| 11) 1,1-Dichloroethene-d2      | 2.13  | 63  | 244829 | 17.95  | ug/L | 0.00 |
| 20) 2-Butanone-d5              | 3.97  | 46  | 335748 | 187.53 | ug/L | 0.00 |
| 24) Chloroform-d               | 4.41  | 84  | 291429 | 18.39  | ug/L | 0.00 |
| 26) 1,2-Dichloroethane-d4      | 5.09  | 65  | 138805 | 18.23  | ug/L | 0.00 |
| 32) Benzene-d6                 | 5.10  | 84  | 582020 | 17.64  | ug/L | 0.00 |
| 36) 1,2-Dichloropropane-d6     | 6.12  | 67  | 169011 | 17.03  | ug/L | 0.00 |
| 41) Toluene-d8                 | 7.36  | 98  | 562191 | 18.40  | ug/L | 0.00 |
| 43) trans-1,3-Dichloropropene- | 7.67  | 79  | 69982  | 20.90  | ug/L | 0.00 |
| 46) 2-Hexanone-d5              | 8.14  | 63  | 293502 | 211.34 | ug/L | 0.00 |
| 57) 1,1,2,2-Tetrachloroethane- | 10.26 | 84  | 118156 | 18.75  | ug/L | 0.00 |
| 64) 1,2-Dichlorobenzene-d4     | 11.68 | 152 | 201908 | 17.53  | ug/L | 0.00 |

#### Target Compounds

|                                |      |     |        |         |      | Qvalue |
|--------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 218420 | 20.828  | ug/L | 99     |
| 3) Chloromethane               | 1.25 | 50  | 147196 | 19.188  | ug/L | 97     |
| 5) Vinyl chloride              | 1.32 | 62  | 150526 | 19.772  | ug/L | 98     |
| 6) Bromomethane                | 1.54 | 94  | 91340  | 19.215  | ug/L | 99     |
| 8) Chloroethane                | 1.60 | 64  | 83531  | 19.188  | ug/L | 99     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 236670 | 20.361  | ug/L | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 131993 | 20.099  | ug/L | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 116594 | 20.332  | ug/L | 92     |
| 13) Acetone                    | 2.23 | 43  | 176039 | 196.154 | ug/L | 96     |
| 14) Carbon disulfide           | 2.32 | 76  | 362360 | 21.573  | ug/L | 98     |
| 15) Methyl Acetate             | 2.48 | 43  | 41653  | 17.635  | ug/L | 95     |
| 16) Methylene chloride         | 2.54 | 84  | 115334 | 17.838  | ug/L | 98     |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 283322 | 20.068  | ug/L | 99     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 124969 | 19.868  | ug/L | 93     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 277694 | 19.995  | ug/L | 99     |
| 21) 2-Butanone                 | 4.06 | 43  | 346436 | 194.572 | ug/L | 99     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 177070 | 20.030  | ug/L | 97     |
| 23) Bromochloromethane         | 4.30 | 128 | 75680  | 20.821  | ug/L | 97     |
| 25) Chloroform                 | 4.43 | 83  | 292480 | 19.161  | ug/L | 100    |
| 27) 1,2-Dichloroethane         | 5.19 | 62  | 171888 | 19.586  | ug/L | 100    |
| 29) 1,1,1-Trichloroethane      | 4.66 | 97  | 266933 | 20.675  | ug/L | 99     |
| 30) Cyclohexane                | 4.72 | 56  | 265439 | 19.873  | ug/L | 100    |
| 31) Carbon tetrachloride       | 4.87 | 117 | 242829 | 21.645  | ug/L | 100    |
| 33) Benzene                    | 5.15 | 78  | 635664 | 19.491  | ug/L | 100    |
| 34) Trichloroethene            | 5.96 | 95  | 179804 | 19.637  | ug/L | 99     |
| 35) Methylcyclohexane          | 6.18 | 83  | 298324 | 20.612  | ug/L | 98     |
| 37) 1,2-Dichloropropane        | 6.23 | 63  | 156774 | 19.284  | ug/L | 100    |
| 38) Bromodichloromethane       | 6.56 | 83  | 199033 | 21.300  | ug/L | 100    |
| 39) cis-1,3-Dichloropropene    | 7.07 | 75  | 236512 | 22.019  | ug/L | 98     |
| 40) 4-Methyl-2-pentanone       | 7.28 | 43  | 823684 | 197.743 | ug/L | 100    |

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Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

Quant Time: Dec 06 04:41:26 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR120518WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Thu Dec 06 04:37:05 2018  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 42) Toluene                    | 7.43  | 91   | 697519   | 20.330  | ug/L  | 99       |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 192172   | 22.605  | ug/L  | 97       |
| 45) 1,1,2-Trichloroethane      | 7.89  | 97   | 108853   | 20.123  | ug/L  | 99       |
| 47) Tetrachloroethene          | 8.02  | 164  | 146298   | 20.525  | ug/L  | 99       |
| 48) 2-Hexanone                 | 8.19  | 43   | 589843   | 202.037 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.29  | 129  | 138859   | 23.190  | ug/L  | 99       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 105449   | 20.573  | ug/L  | 98       |
| 51) Chlorobenzene              | 8.93  | 112  | 449588   | 19.857  | ug/L  | 100      |
| 52) Ethylbenzene               | 9.06  | 91   | 779007   | 20.955  | ug/L  | 100      |
| 53) m,p-xylene                 | 9.18  | 106  | 299835   | 21.451  | ug/L  | 99       |
| 54) o-xylene                   | 9.59  | 106  | 288739   | 21.520  | ug/L  | 100      |
| 55) Styrene                    | 9.60  | 104  | 490234   | 21.886  | ug/L  | 99       |
| 56) Isopropylbenzene           | 9.98  | 105  | 781770   | 21.338  | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 120322   | 21.020  | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 91976    | 19.641  | ug/L  | 98       |
| 61) Bromoform                  | 9.78  | 173  | 72773    | 23.359  | ug/L  | 97       |
| 62) 1,3-Dichlorobenzene        | 11.23 | 146  | 365921   | 19.824  | ug/L  | 99       |
| 63) 1,4-Dichlorobenzene        | 11.32 | 146  | 366639   | 19.933  | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 334794   | 19.166  | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 19627    | 22.786  | ug/L  | 90       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 283947   | 20.932  | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 235021   | 23.437  | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 380689   | 25.844  | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 212857   | 22.615  | ug/L  | 98       |

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

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```
ALS Vial      : 6      Sample Multiplier: 1
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**Instrument :**  
MSVOA\_V  
**ClientSampleId :**  
VSTD02068

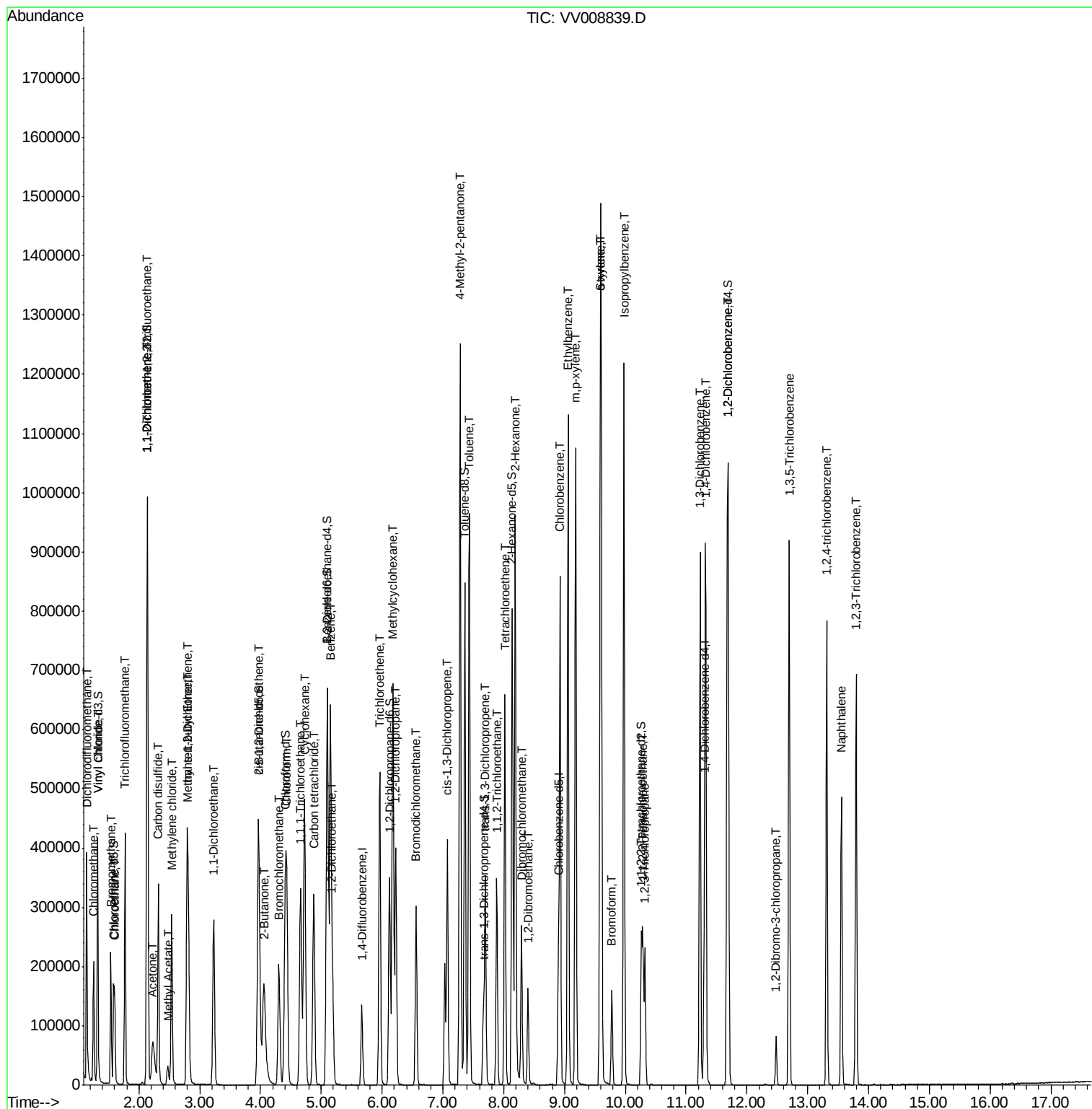
Quant Time: Dec 06 04:41:26 2018

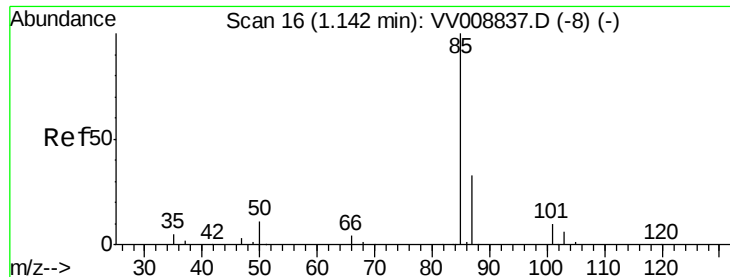
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Quant Title : TRACE VOA SOM01.0

QLast Update : Thu Dec 06 04:37:05 2018

Response via : Initial Calibration

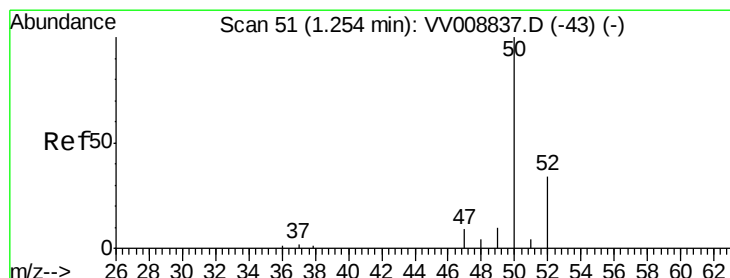
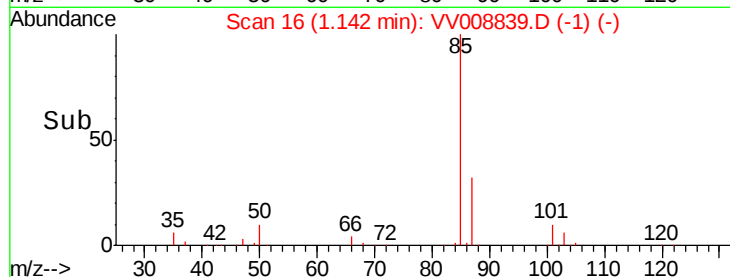
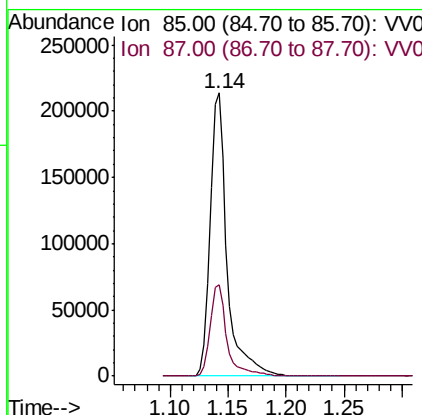
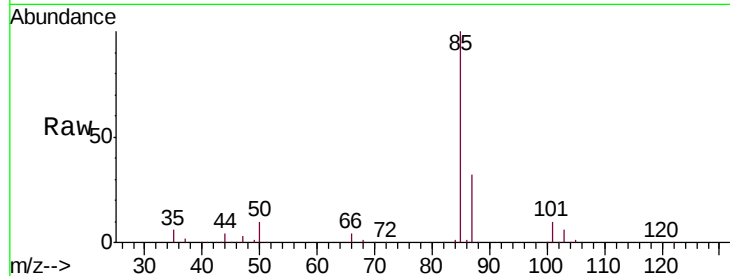




#2  
Dichlorodifluoromethane  
Concen: 20.828 ug/L  
RT: 1.14 min Scan# 16  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

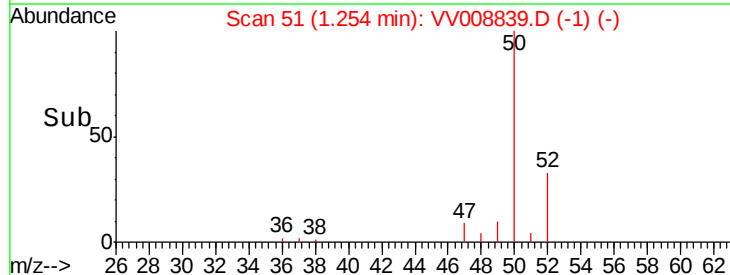
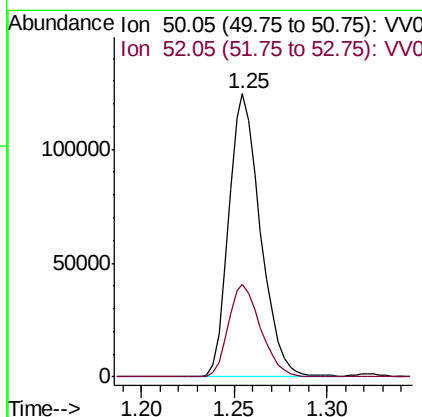
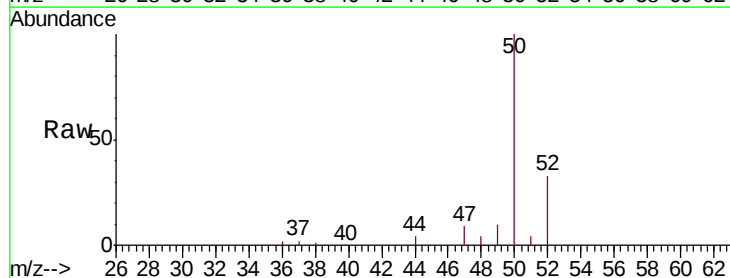
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

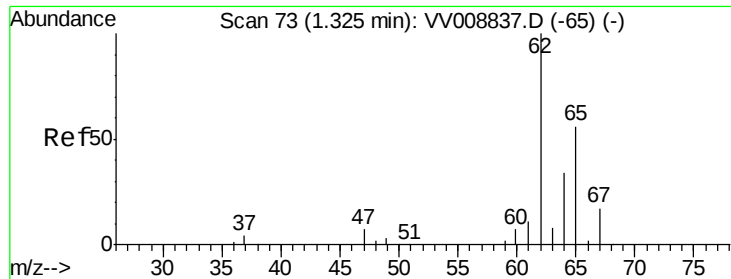
Tgt Ion: 85 Resp: 218420  
Ion Ratio Lower Upper  
85 100  
87 32.3 26.3 39.5



#3  
Chloromethane  
Concen: 19.188 ug/L  
RT: 1.25 min Scan# 51  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Tgt Ion: 50 Resp: 147196  
Ion Ratio Lower Upper  
50 100  
52 32.7 23.9 44.5





#5

Vinyl chloride

Concen: 19.772 ug/L

RT: 1.32 min Scan# 72

Delta R.T. -0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

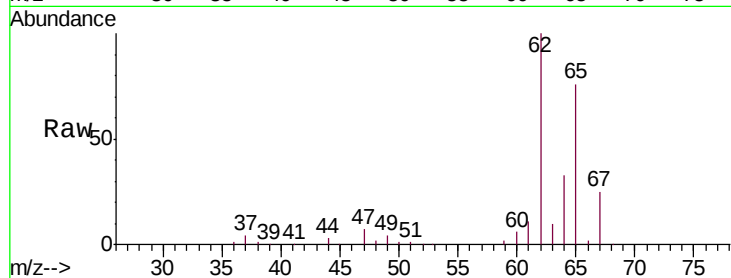
VSTD02068

Tgt Ion: 62 Resp: 150526

Ion Ratio Lower Upper

62 100

64 32.7 23.9 44.3



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.10 (63.80 to 64.80): VV0

1.32

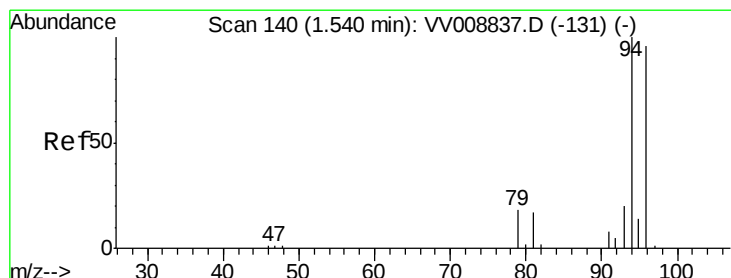
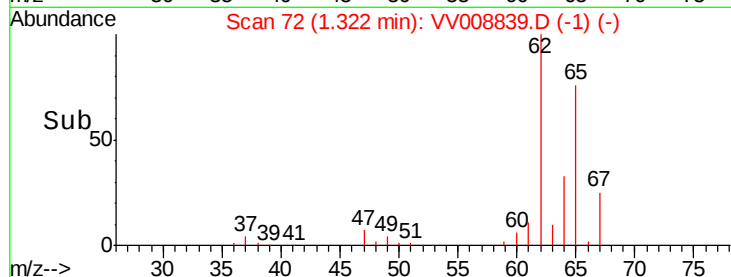
150000

100000

50000

0

Time-->



#6

Bromomethane

Concen: 19.215 ug/L

RT: 1.54 min Scan# 139

Delta R.T. -0.00 min

Lab File: VV008839.D

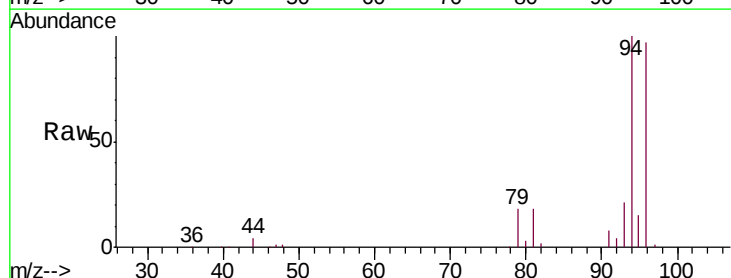
Acq: 05 Dec 2018 11:49

Tgt Ion: 94 Resp: 91340

Ion Ratio Lower Upper

94 100

96 96.7 67.0 124.4



Abundance Ion 94.00 (93.70 to 94.70): VV0

Ion 96.00 (95.70 to 96.70): VV0

1.54

80000

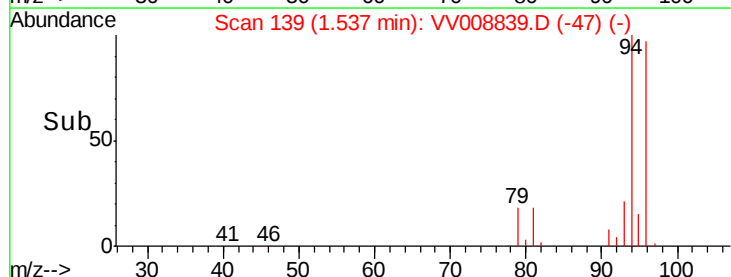
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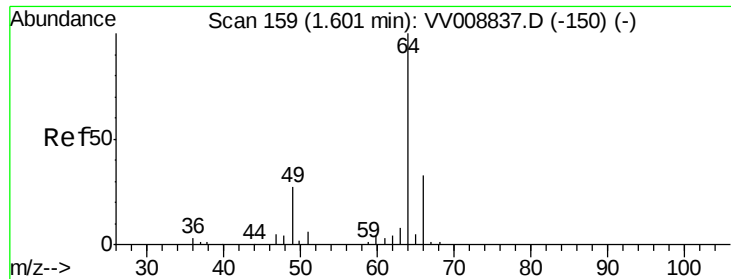
40000

20000

0

Time-->





#8

Chloroethane

Concen: 19.188 ug/L

RT: 1.60 min Scan# 159

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

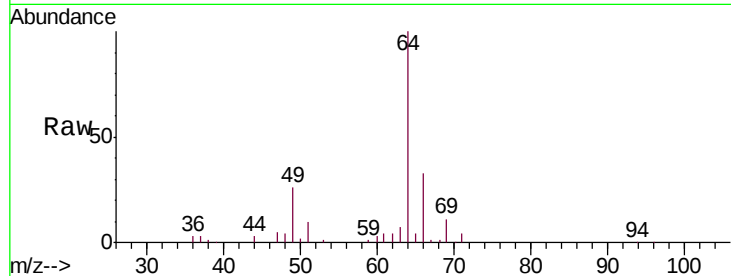
VSTD02068

Tgt Ion: 64 Resp: 83531

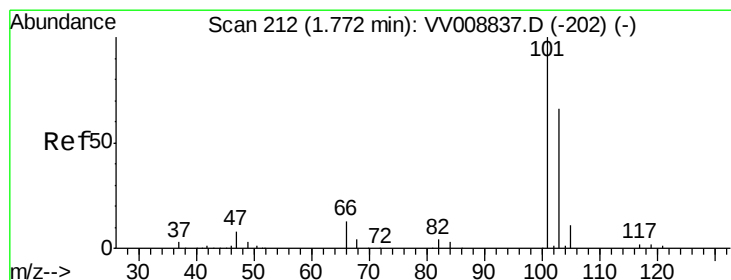
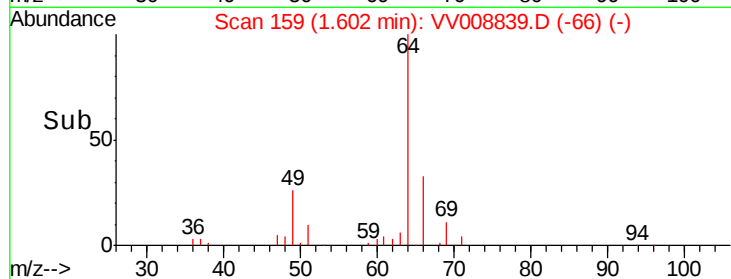
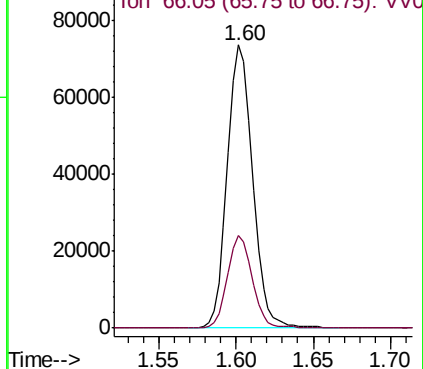
Ion Ratio Lower Upper

64 100

66 32.8 23.4 43.6



Abundance Ion 64.10 (63.80 to 64.80): VV008839.D (-150) (-)



#9

Trichlorofluoromethane

Concen: 20.361 ug/L

RT: 1.77 min Scan# 212

Delta R.T. 0.00 min

Lab File: VV008839.D

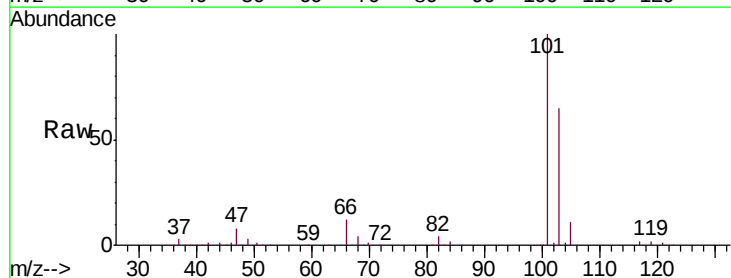
Acq: 05 Dec 2018 11:49

Tgt Ion: 101 Resp: 236670

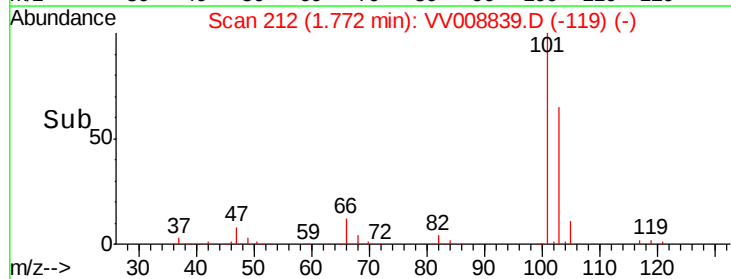
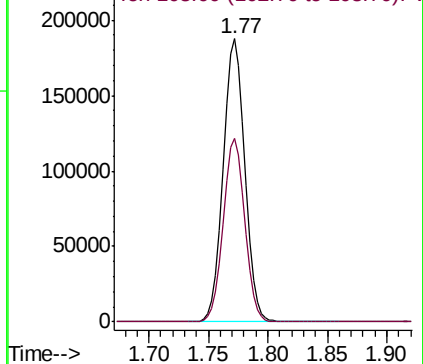
Ion Ratio Lower Upper

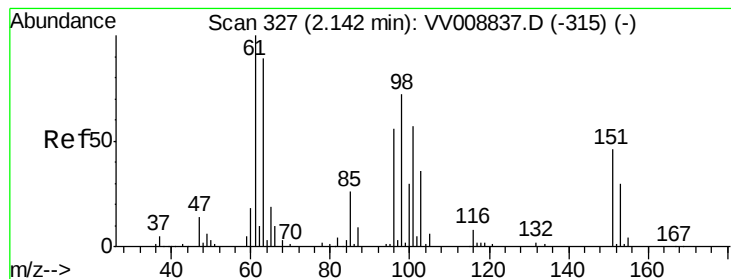
101 100

103 64.6 52.5 78.7



Abundance Ion 101.00 (100.70 to 101.70): VV008839.D (-202) (-)





#10

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

Concen: 20.099 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02068

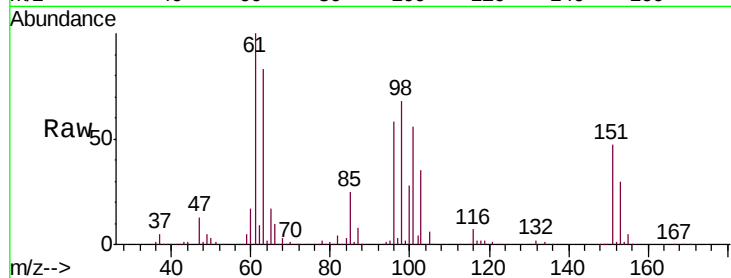
Tgt Ion: 101 Resp: 131993

Ion Ratio Lower Upper

101 100

85 43.0 35.0 52.6

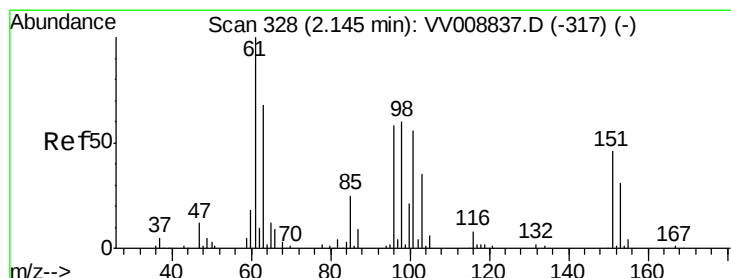
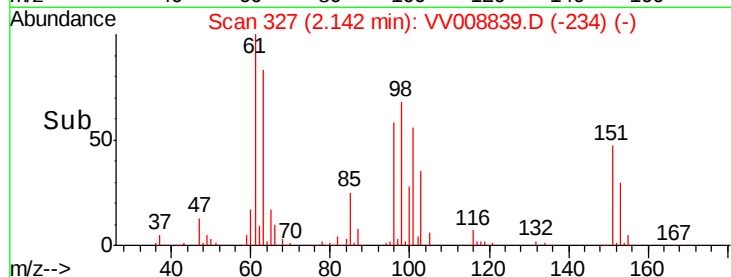
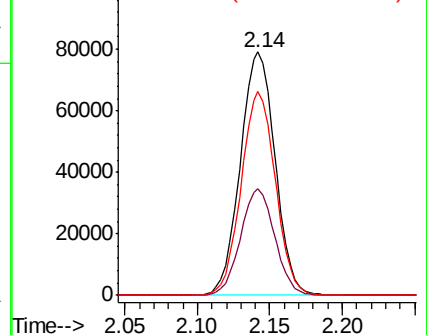
151 82.3 65.1 97.7



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: 20.332 ug/L

RT: 2.14 min Scan# 327

Delta R.T. -0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

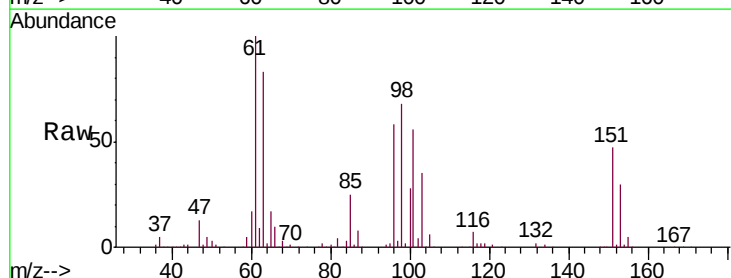
Tgt Ion: 96 Resp: 116594

Ion Ratio Lower Upper

96 100

61 171.8 120.8 224.4

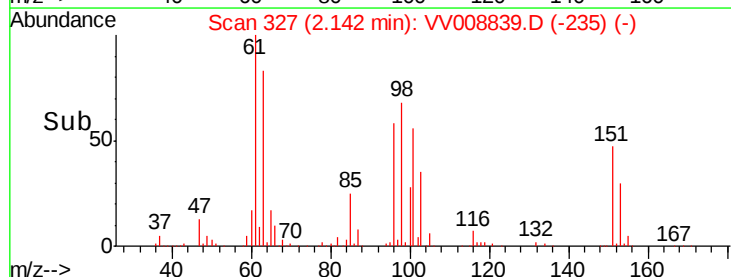
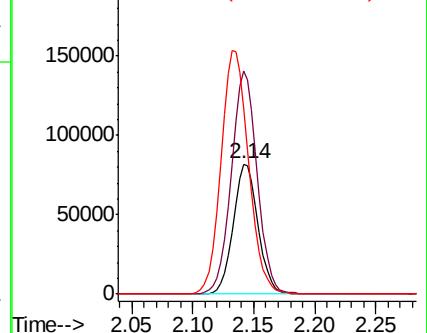
63 143.2 85.0 158.0

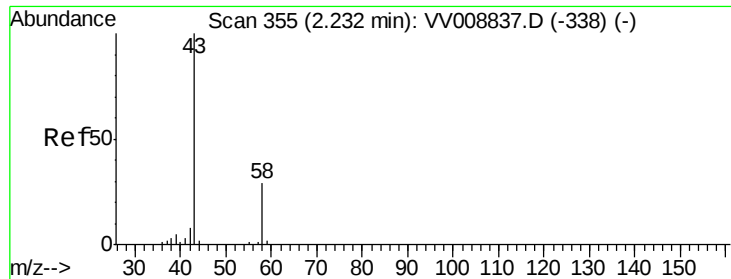


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 196.154 ug/L

RT: 2.23 min Scan# 354

Delta R.T. -0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

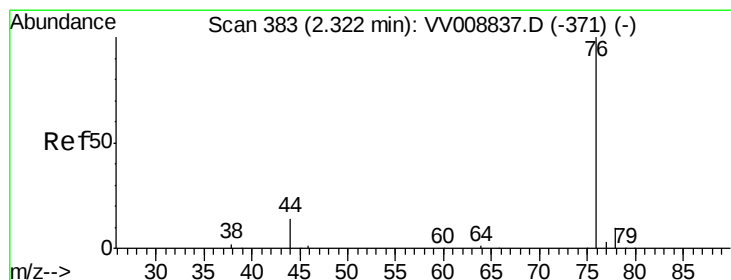
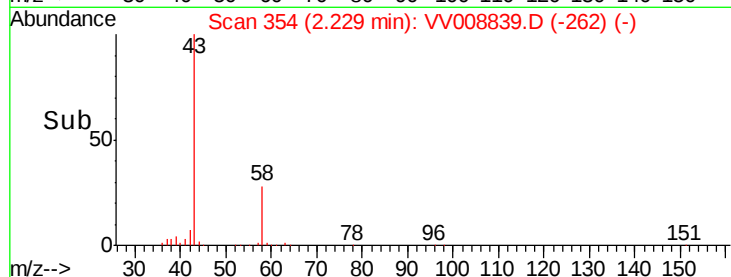
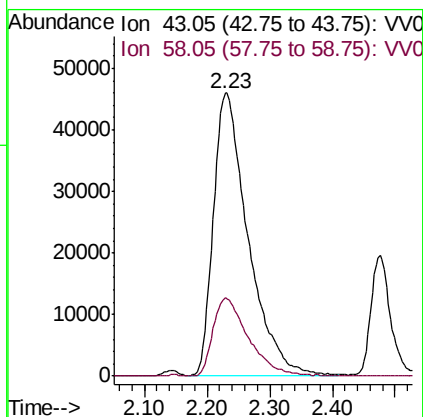
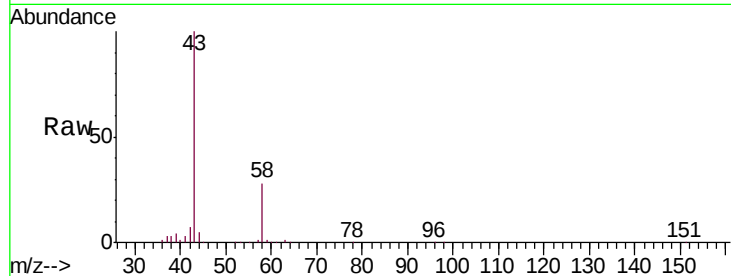
VSTD02068

Tgt Ion: 43 Resp: 176039

Ion Ratio Lower Upper

43 100

58 28.4 0.0 52.4



#14

Carbon disulfide

Concen: 21.573 ug/L

RT: 2.32 min Scan# 382

Delta R.T. -0.00 min

Lab File: VV008839.D

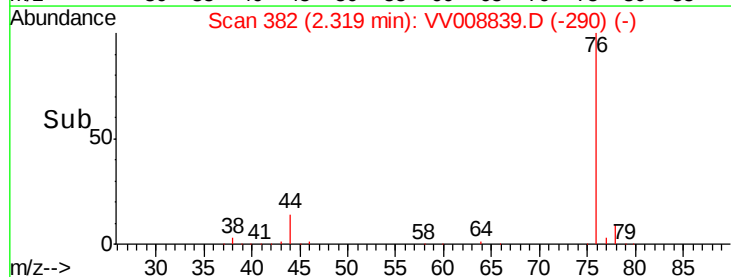
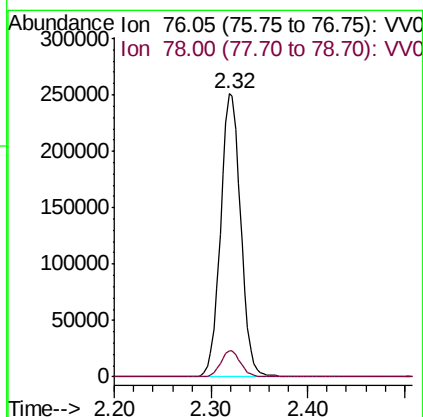
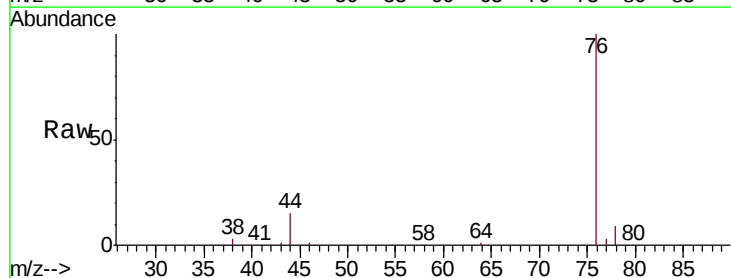
Acq: 05 Dec 2018 11:49

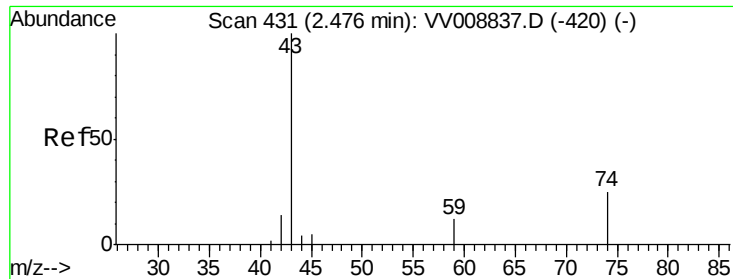
Tgt Ion: 76 Resp: 362360

Ion Ratio Lower Upper

76 100

78 9.2 8.0 12.0

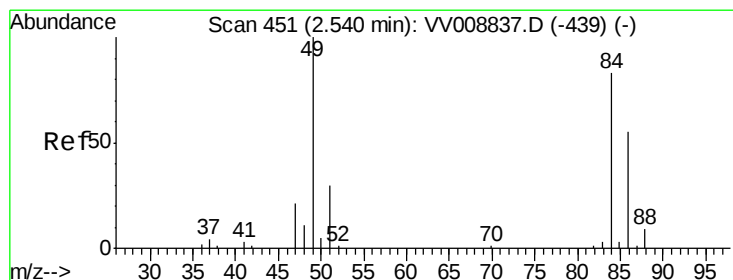
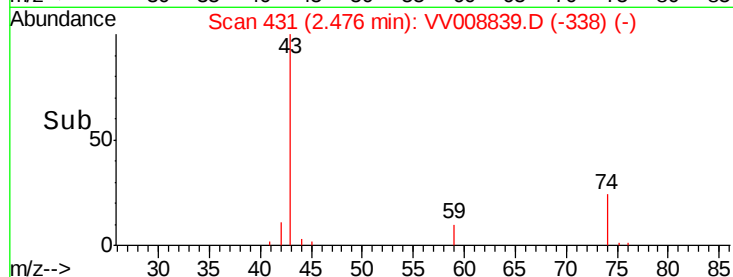
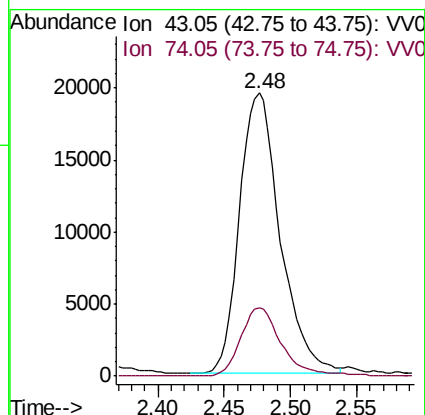
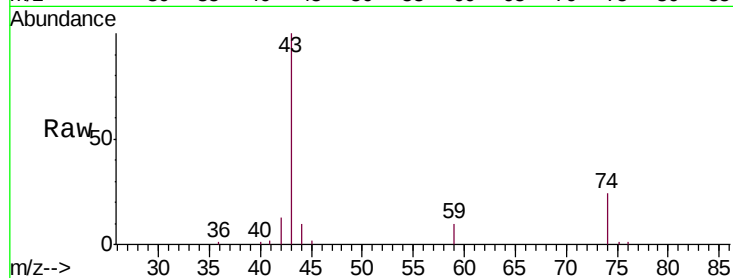




#15  
Methyl Acetate  
Concen: 17.635 ug/L  
RT: 2.48 min Scan# 431  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

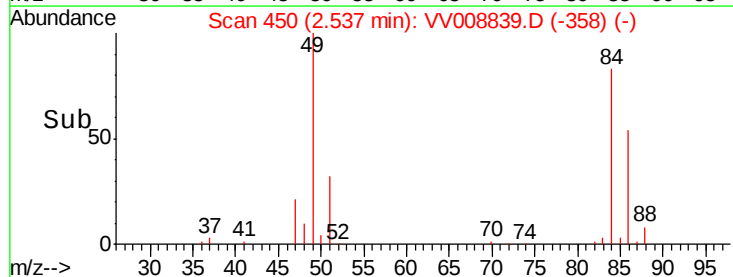
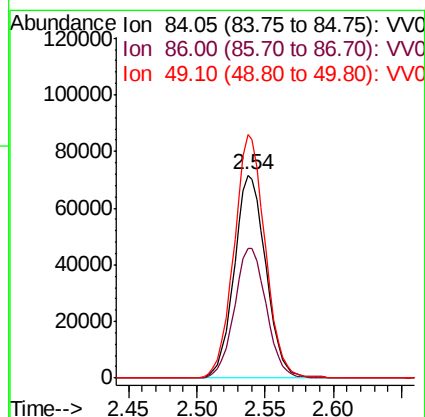
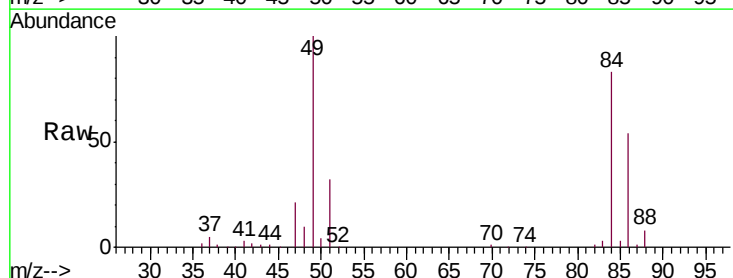
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

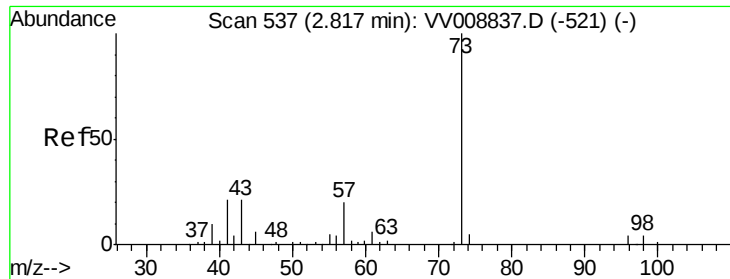
Tgt Ion: 43 Resp: 41653  
Ion Ratio Lower Upper  
43 100  
74 24.5 21.8 32.6



#16  
Methylene chloride  
Concen: 17.838 ug/L  
RT: 2.54 min Scan# 450  
Delta R.T. -0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Tgt Ion: 84 Resp: 115334  
Ion Ratio Lower Upper  
84 100  
86 64.3 46.7 86.7  
49 120.1 84.8 157.4

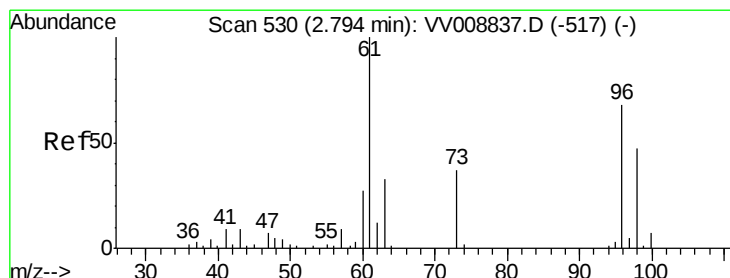
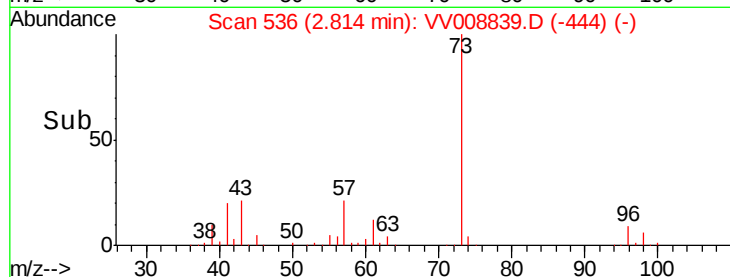
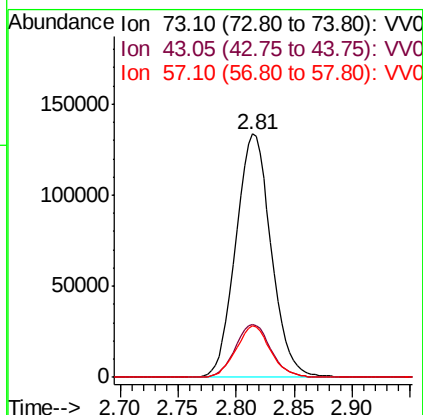
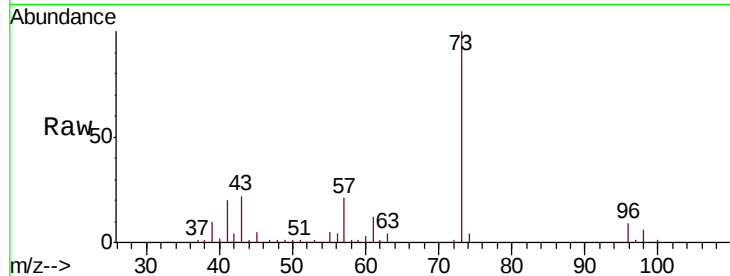




#17  
Methyl tert-butyl Ether  
Concen: 20.068 ug/L  
RT: 2.81 min Scan# 536  
Delta R.T. -0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

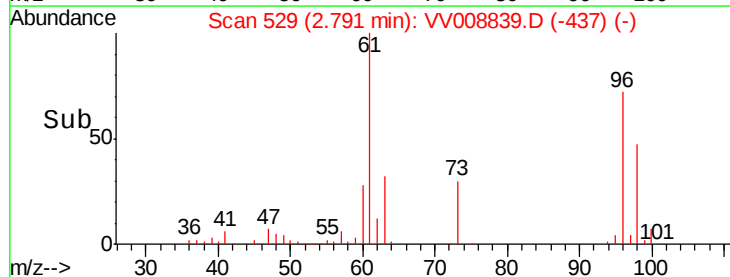
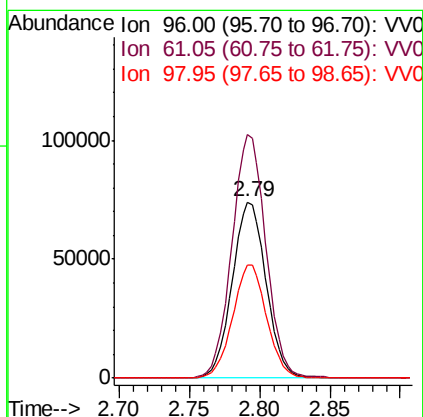
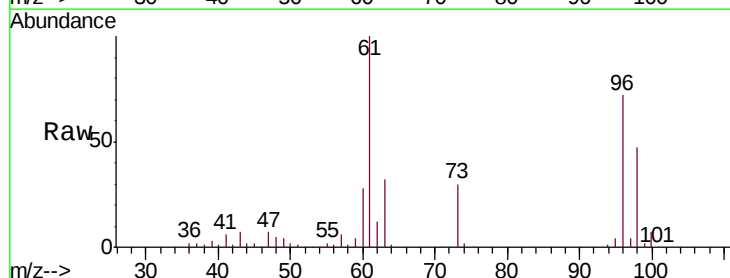
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

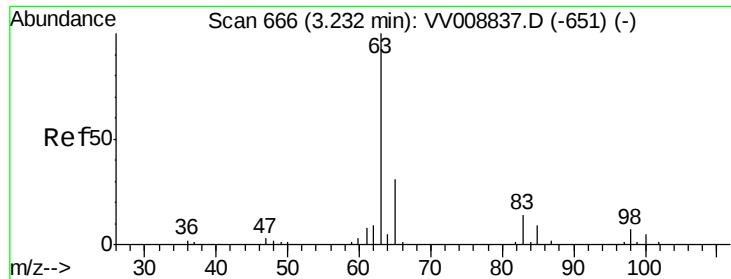
Tgt Ion: 73 Resp: 283322  
Ion Ratio Lower Upper  
73 100  
43 22.1 17.3 25.9  
57 20.5 16.8 25.2



#18  
trans-1,2-Dichloroethene  
Concen: 19.868 ug/L  
RT: 2.79 min Scan# 529  
Delta R.T. -0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Tgt Ion: 96 Resp: 124969  
Ion Ratio Lower Upper  
96 100  
61 138.3 103.0 191.4  
98 64.4 48.9 90.9

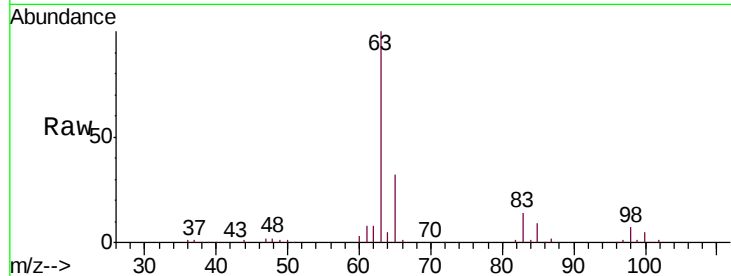




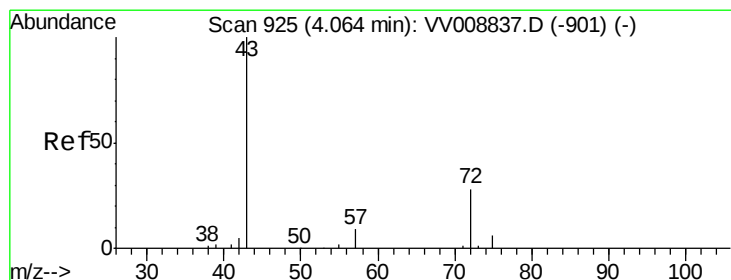
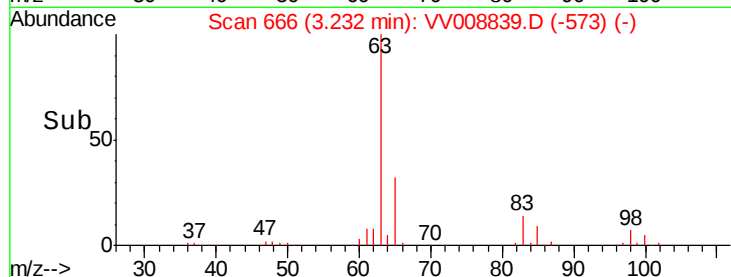
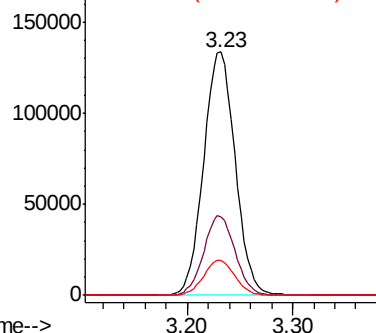
#19  
 1,1-Dichloroethane  
 Concen: 19.995 ug/L  
 RT: 3.23 min Scan# 666  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02068

Tgt Ion: 63 Resp: 277694  
 Ion Ratio Lower Upper  
 63 100  
 65 32.4 22.0 40.8  
 83 14.1 10.1 18.7

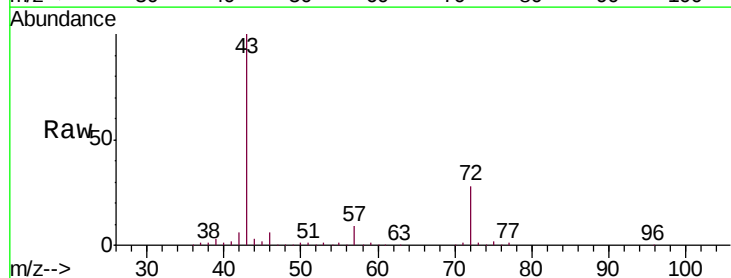


Abundance Ion 63.10 (62.80 to 63.80): VV0  
 Ion 65.10 (64.80 to 65.80): VV0  
 Ion 83.05 (82.75 to 83.75): VV0

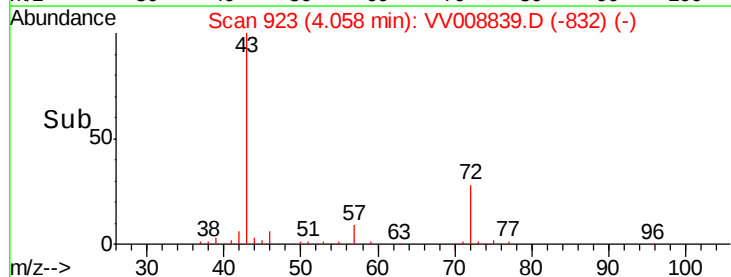
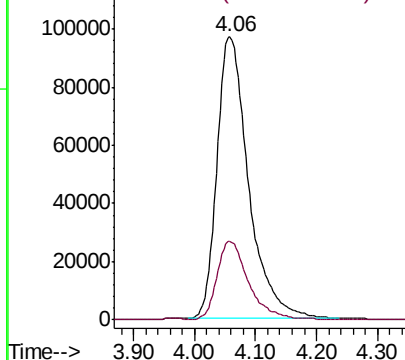


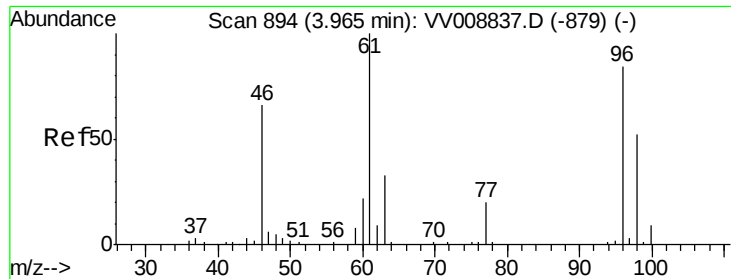
#21  
 2-Butanone  
 Concen: 194.572 ug/L  
 RT: 4.06 min Scan# 923  
 Delta R.T. -0.01 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Tgt Ion: 43 Resp: 346436  
 Ion Ratio Lower Upper  
 43 100  
 72 27.9 13.7 41.1



Abundance Ion 43.05 (42.75 to 43.75): VV0  
 Ion 72.10 (71.80 to 72.80): VV0



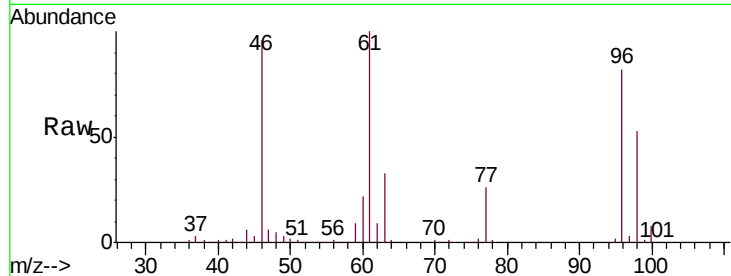


#22

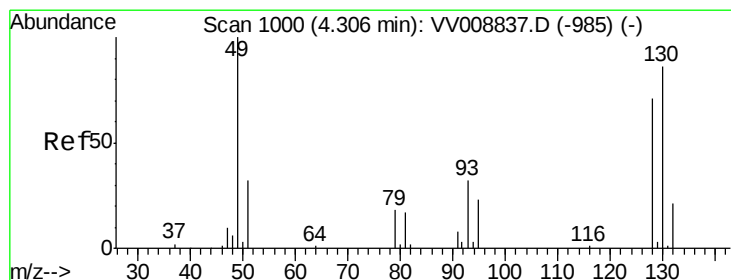
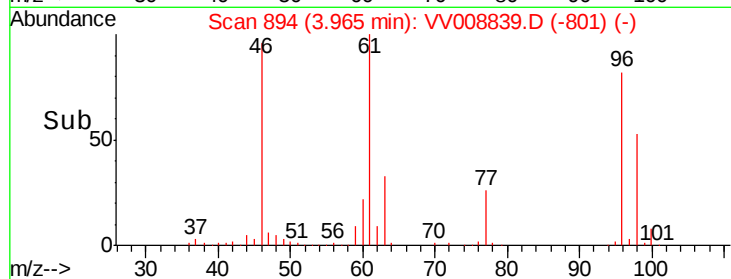
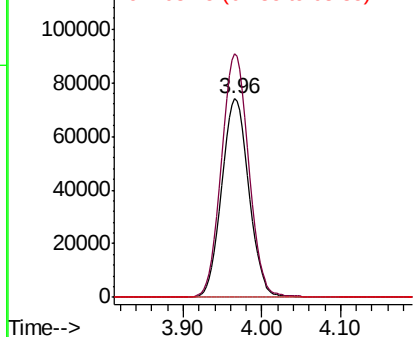
cis-1,2-Dichloroethene  
 Concen: 20.030 ug/L  
 RT: 3.96 min Scan# 894  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02068

Tgt Ion: 96 Resp: 177070  
 Ion Ratio Lower Upper  
 96 100  
 61 122.7 83.2 154.6  
 68 0.0 0.0 0.0



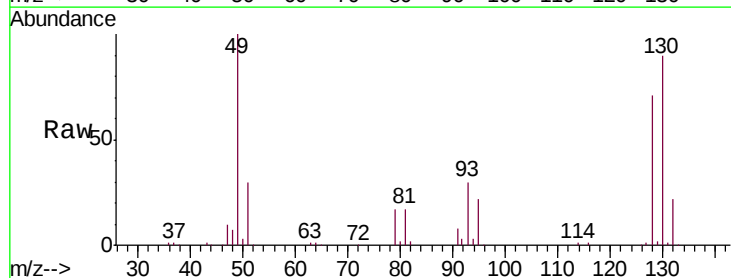
Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0  
 Ion 68.15 (67.85 to 68.85): VV0



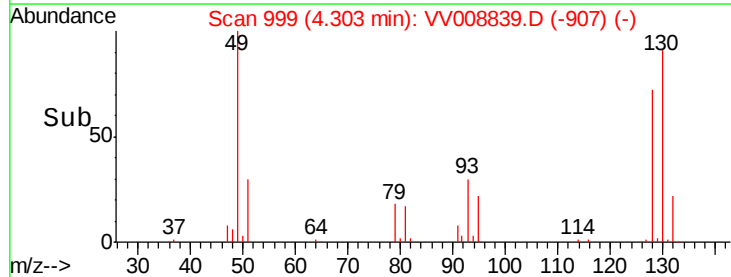
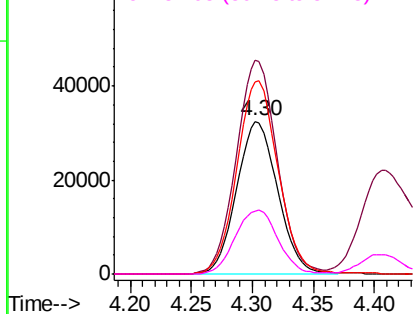
#23

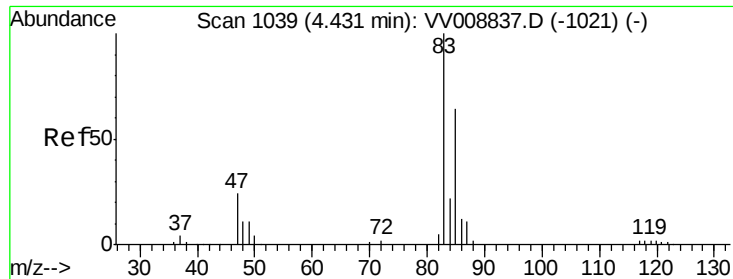
Bromochloromethane  
 Concen: 20.821 ug/L  
 RT: 4.30 min Scan# 999  
 Delta R.T. -0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Tgt Ion: 128 Resp: 75680  
 Ion Ratio Lower Upper  
 128 100  
 49 140.0 98.1 182.3  
 130 126.1 84.2 156.4  
 51 41.5 35.4 53.2



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

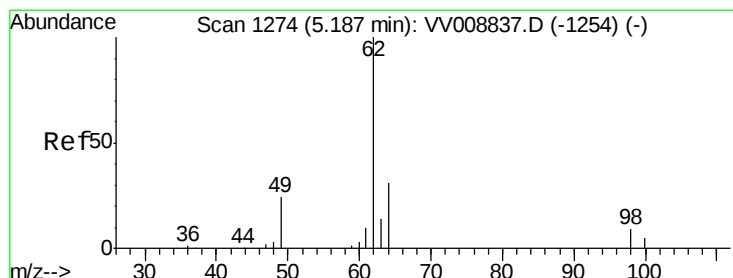
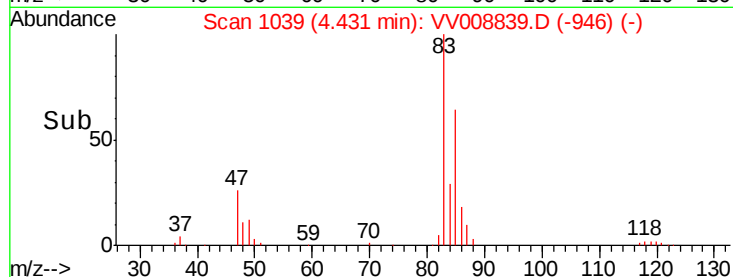
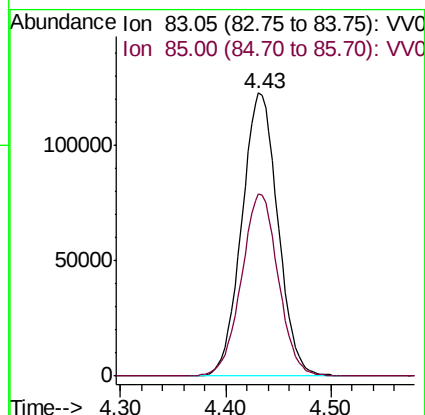
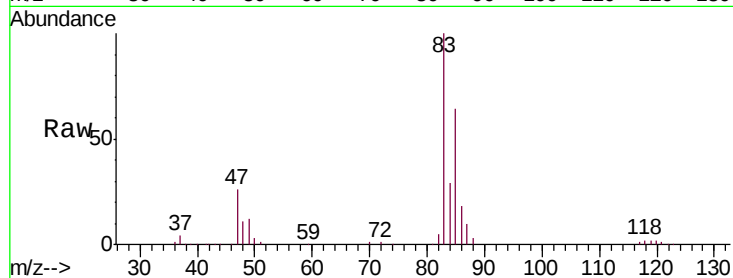




#25  
Chloroform  
Concen: 19.161 ug/L  
RT: 4.43 min Scan# 1039  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

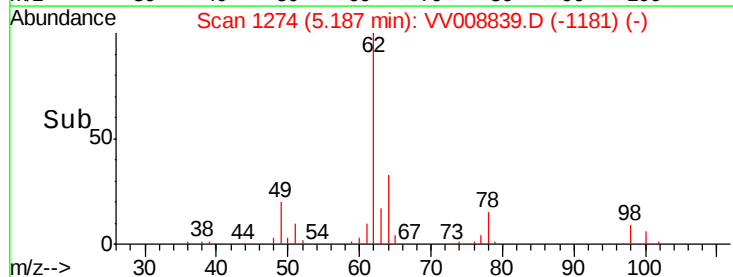
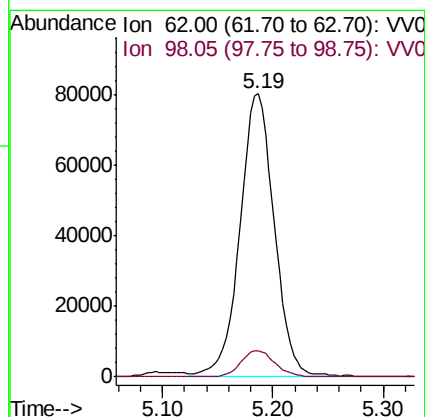
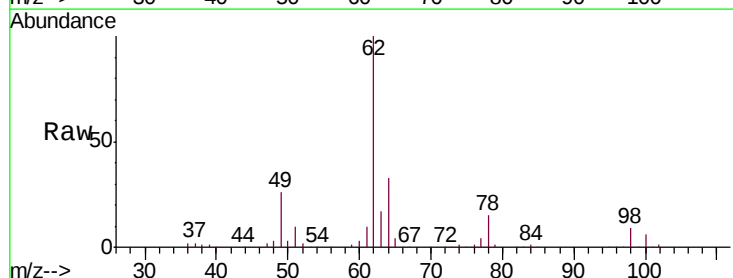
Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

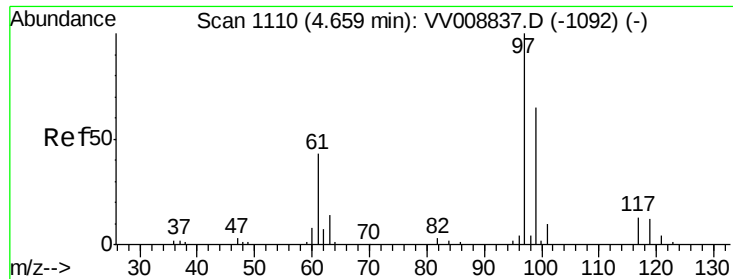
Tgt Ion: 83 Resp: 292480  
Ion Ratio Lower Upper  
83 100  
85 64.2 44.9 83.5



#27  
1,2-Dichloroethane  
Concen: 19.586 ug/L  
RT: 5.19 min Scan# 1274  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Tgt Ion: 62 Resp: 171888  
Ion Ratio Lower Upper  
62 100  
98 9.3 7.3 10.9

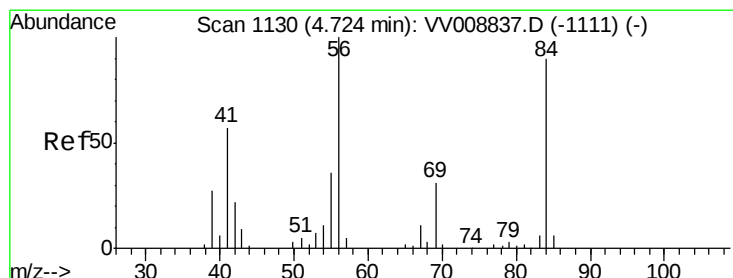
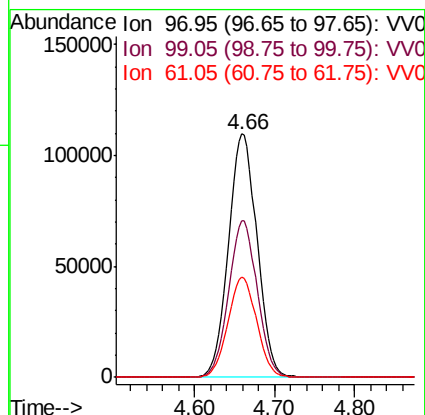
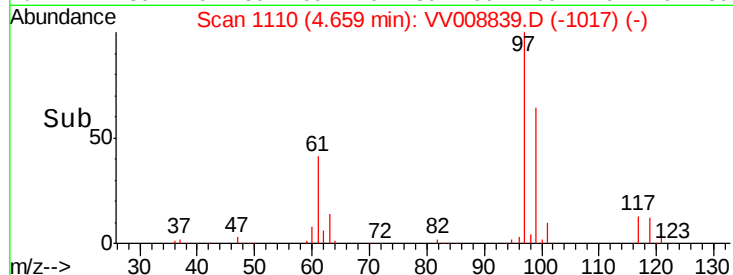
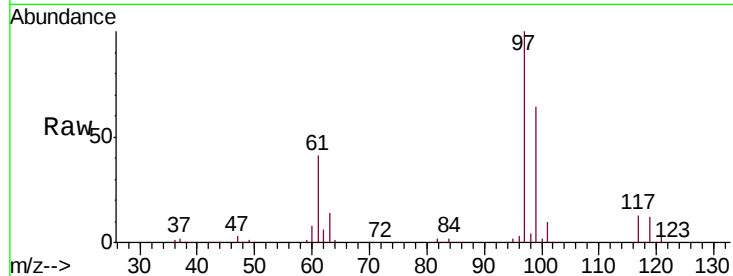




#29  
 1,1,1-Trichloroethane  
 Concen: 20.675 ug/L  
 RT: 4.66 min Scan# 1110  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

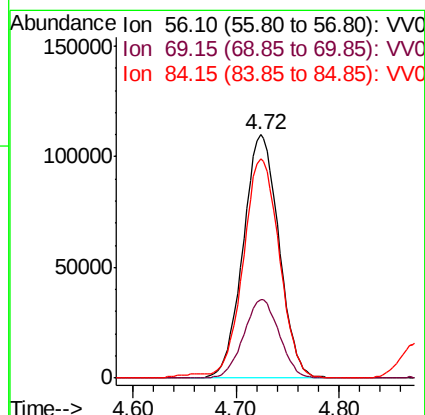
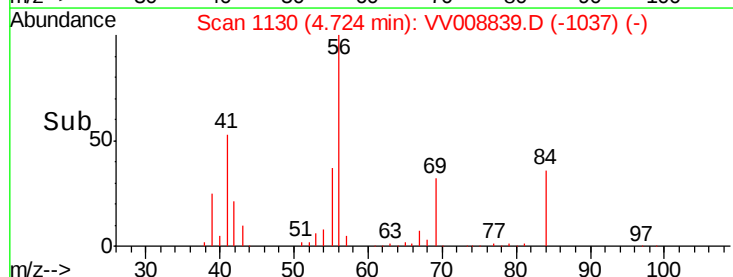
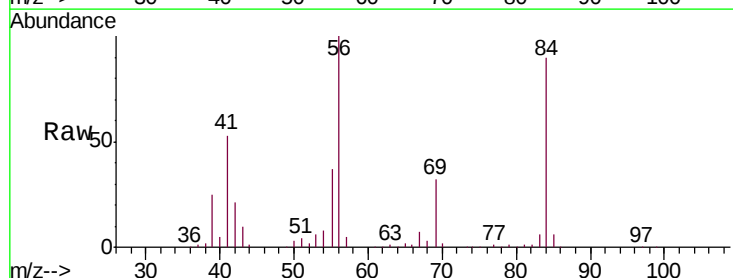
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD02068

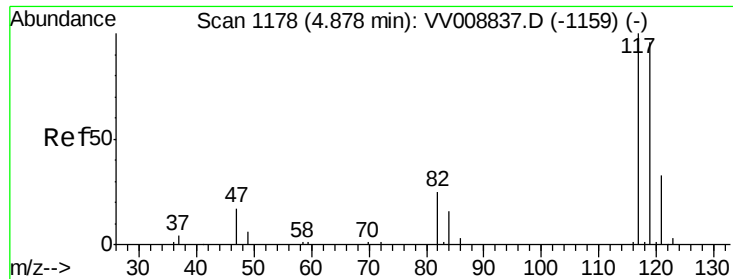
Tgt Ion: 97 Resp: 266933  
 Ion Ratio Lower Upper  
 97 100  
 99 64.2 50.7 76.1  
 61 41.6 34.0 51.0



#30  
 Cyclohexane  
 Concen: 19.873 ug/L  
 RT: 4.72 min Scan# 1130  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Tgt Ion: 56 Resp: 265439  
 Ion Ratio Lower Upper  
 56 100  
 69 32.1 25.4 38.2  
 84 90.5 72.2 108.2

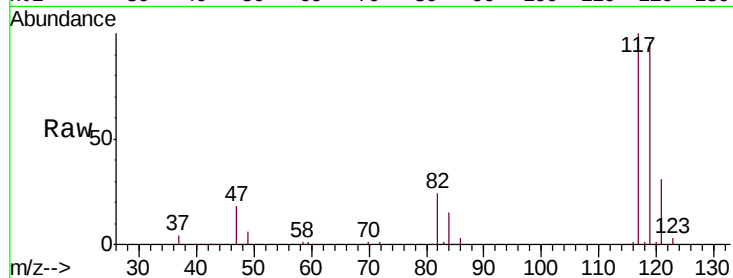




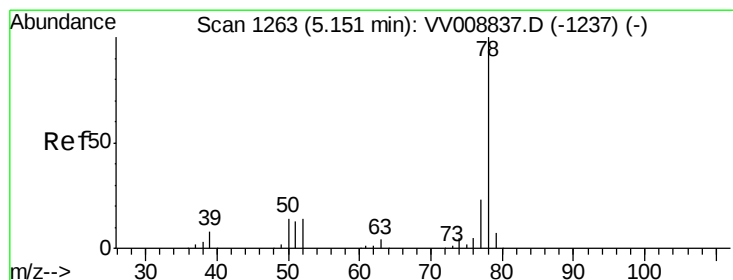
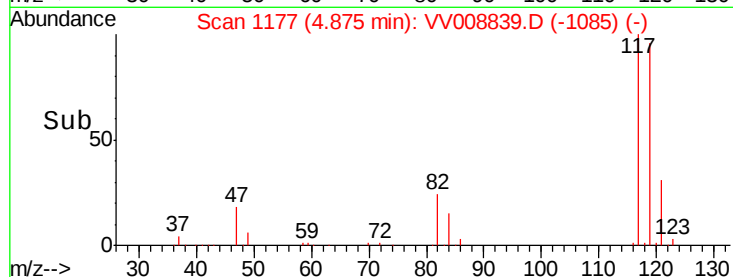
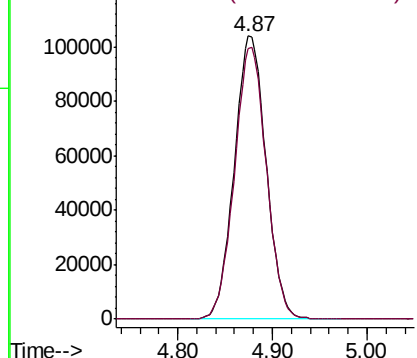
#31  
Carbon tetrachloride  
Concen: 21.645 ug/L  
RT: 4.87 min Scan# 1177  
Delta R.T. -0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

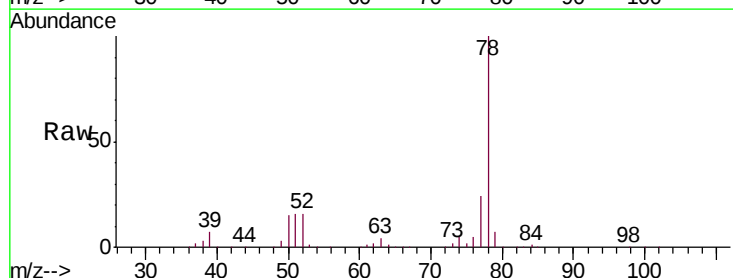
Tgt Ion:117 Resp: 242829  
Ion Ratio Lower Upper  
117 100  
119 96.3 77.1 115.7



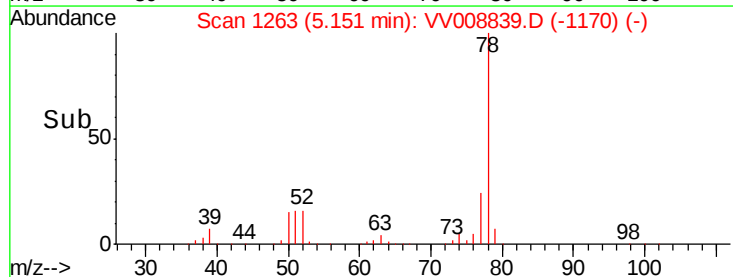
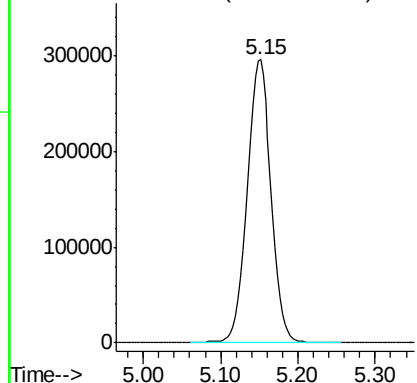
Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 118.90 (118.60 to 119.60): V

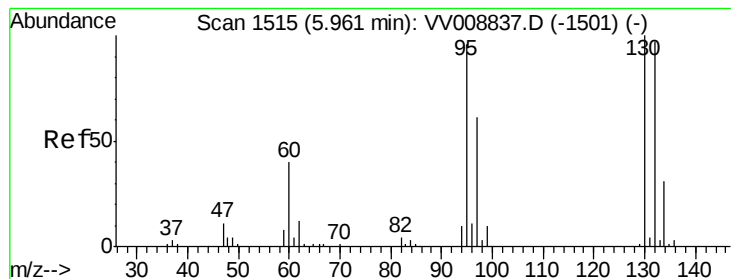


#33  
Benzene  
Concen: 19.491 ug/L  
RT: 5.15 min Scan# 1263  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49  
Tgt Ion: 78 Resp: 635664



Abundance Ion 78.10 (77.80 to 78.80): VV0





#34

Trichloroethene

Concen: 19.637 ug/L

RT: 5.96 min Scan# 1515

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02068

Tgt Ion: 95 Resp: 179804

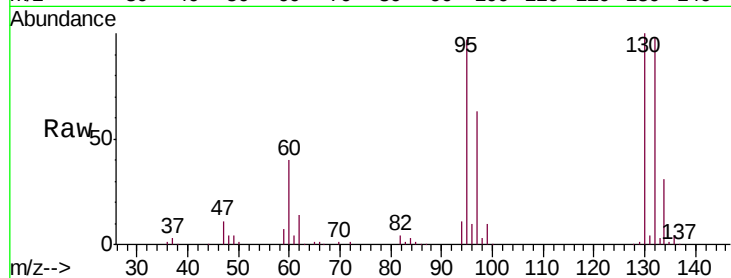
Ion Ratio Lower Upper

95 100

97 65.1 44.4 82.5

132 100.6 70.7 131.3

130 102.8 72.9 135.3

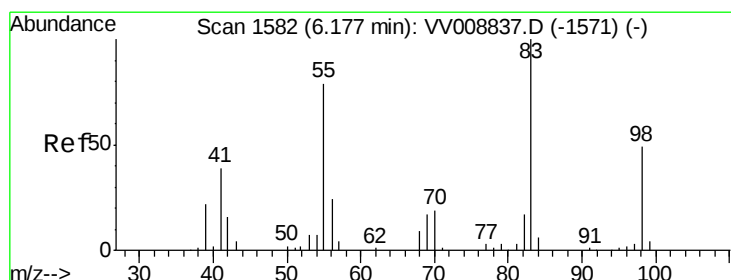
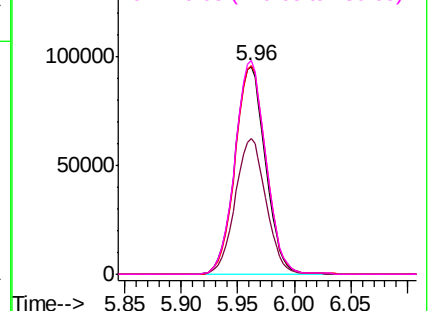
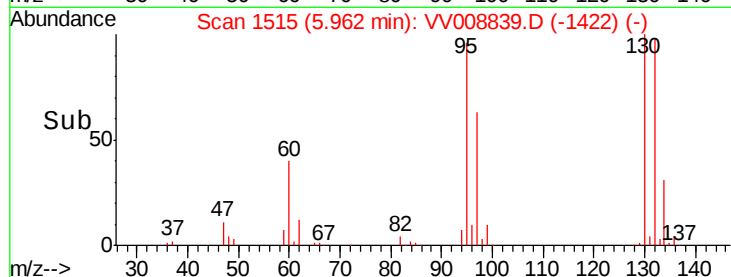


Abundance Ion 95.00 (94.70 to 95.70): VV008839.D (-1422) (-)

Ion 96.95 (96.65 to 97.65): VV008839.D (-1422) (-)

Ion 131.95 (131.65 to 132.65): VV008839.D (-1422) (-)

Ion 129.95 (129.65 to 130.65): VV008839.D (-1422) (-)



#35

Methylcyclohexane

Concen: 20.612 ug/L

RT: 6.18 min Scan# 1582

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

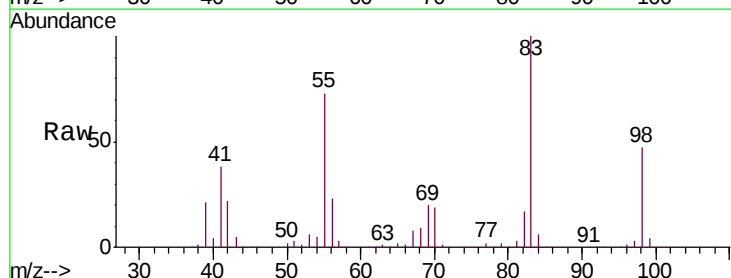
Tgt Ion: 83 Resp: 298324

Ion Ratio Lower Upper

83 100

55 73.7 60.0 90.0

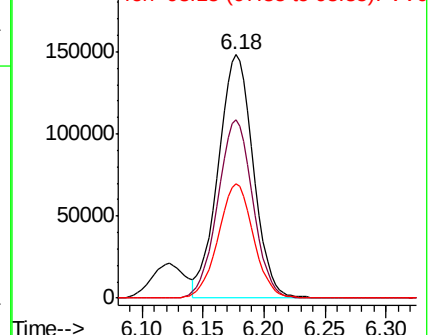
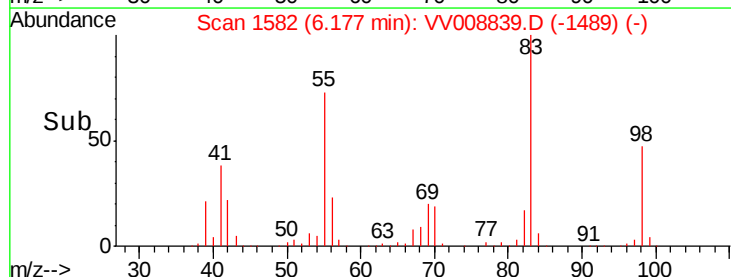
98 47.4 39.0 58.6

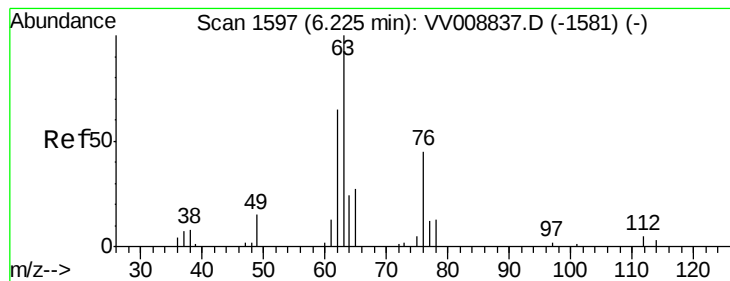


Abundance Ion 83.15 (82.85 to 83.85): VV008839.D (-1489) (-)

Ion 55.10 (54.80 to 55.80): VV008839.D (-1489) (-)

Ion 98.15 (97.85 to 98.85): VV008839.D (-1489) (-)





#37

1,2-Dichloropropane

Concen: 19.284 ug/L

RT: 6.23 min Scan# 1597

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

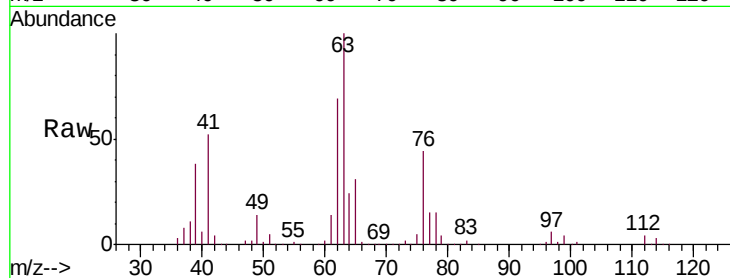
VSTD02068

Tgt Ion: 63 Resp: 156774

Ion Ratio Lower Upper

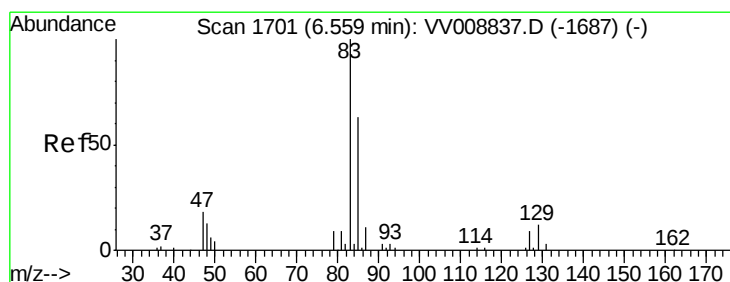
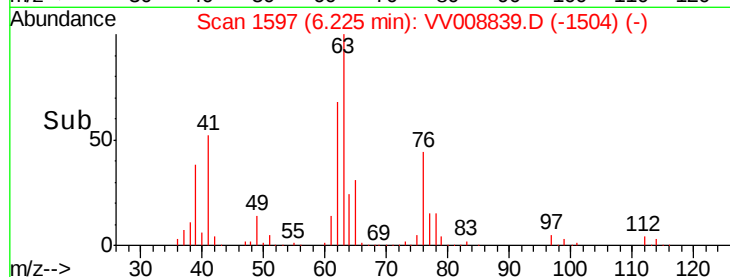
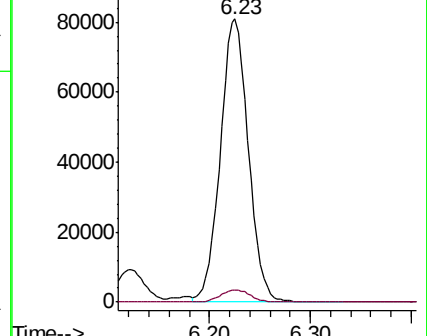
63 100

112 4.5 3.5 5.3



Abundance Ion 63.10 (62.80 to 63.80): VV0

Ion 112.10 (111.80 to 112.80): V



#38

Bromodichloromethane

Concen: 21.300 ug/L

RT: 6.56 min Scan# 1701

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

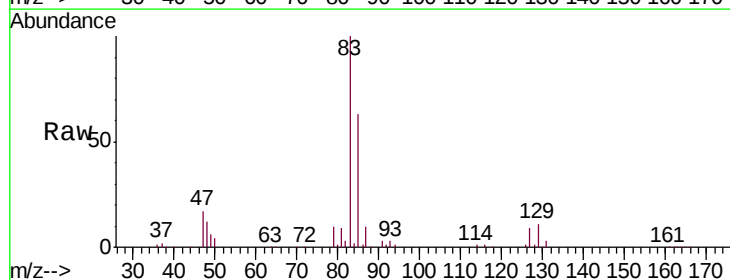
Tgt Ion: 83 Resp: 199033

Ion Ratio Lower Upper

83 100

85 63.2 44.2 82.0

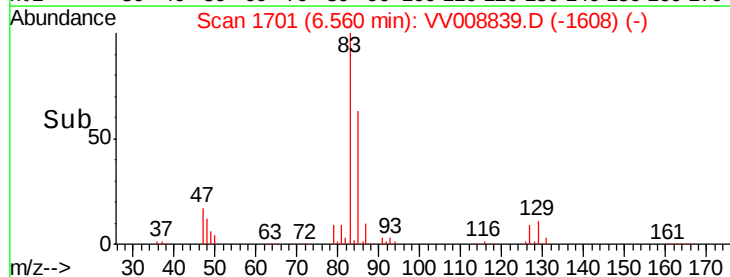
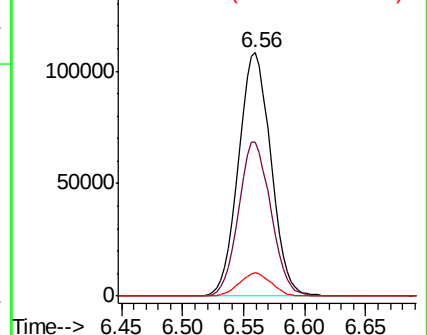
127 9.4 7.5 11.3

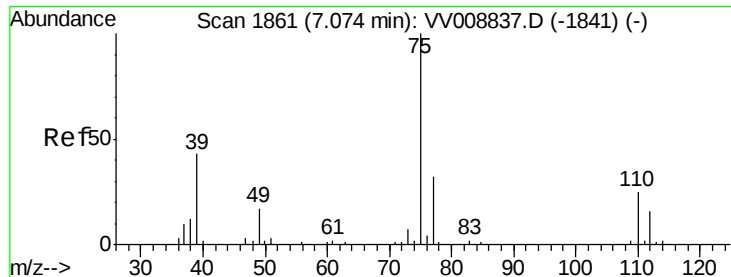


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 126.90 (126.60 to 127.60): V

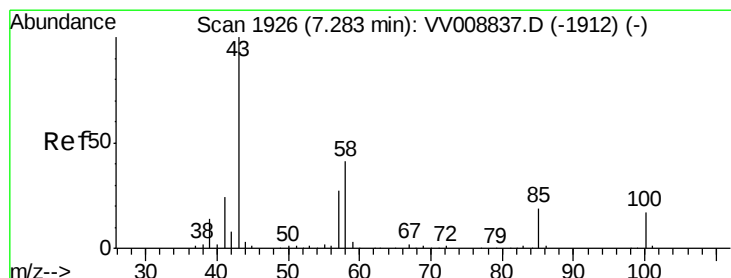
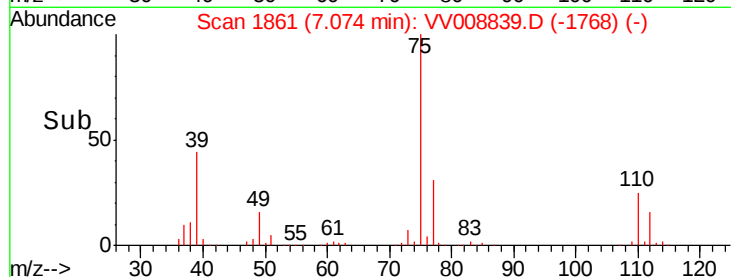
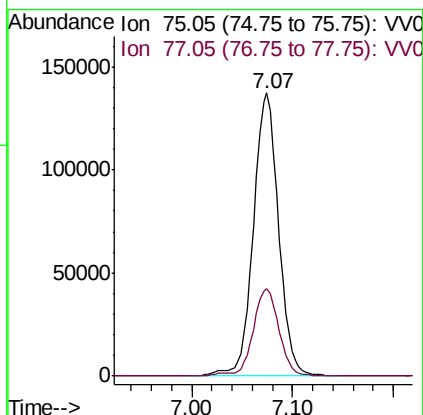
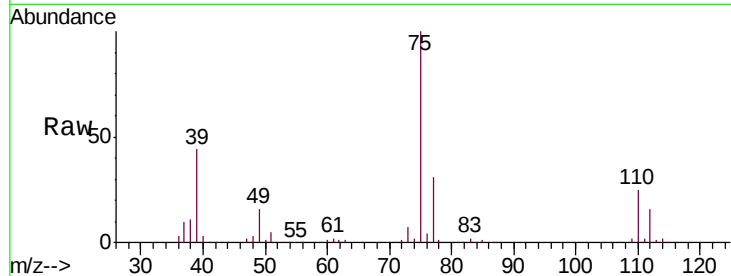




#39  
 cis-1,3-Dichloropropene  
 Concen: 22.019 ug/L  
 RT: 7.07 min Scan# 1861  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

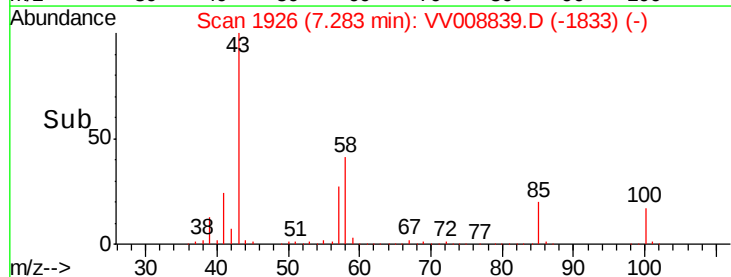
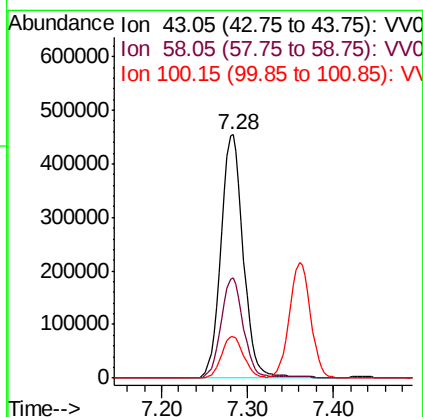
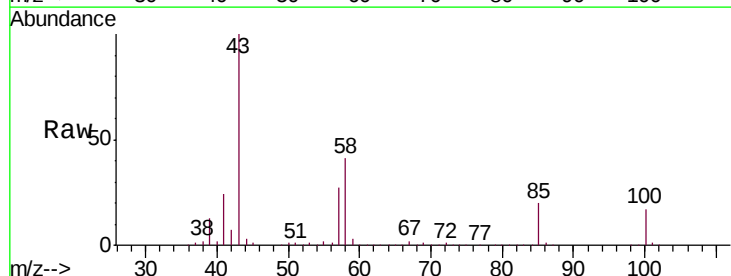
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02068

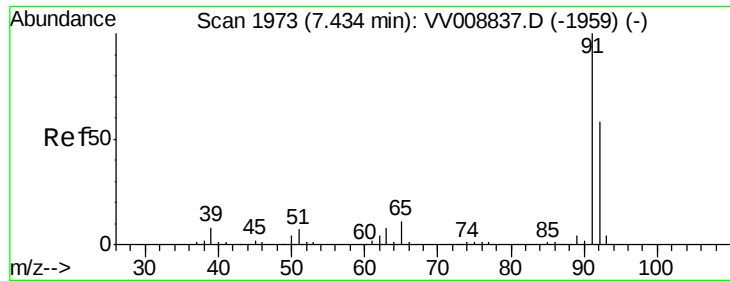
Tgt Ion: 75 Resp: 236512  
 Ion Ratio Lower Upper  
 75 100  
 77 30.8 22.3 41.3



#40  
 4-Methyl-2-pentanone  
 Concen: 197.743 ug/L  
 RT: 7.28 min Scan# 1926  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Tgt Ion: 43 Resp: 823684  
 Ion Ratio Lower Upper  
 43 100  
 58 40.8 32.6 48.8  
 100 16.9 13.4 20.0





#42

Toluene

Concen: 20.330 ug/L

RT: 7.43 min Scan# 1973

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

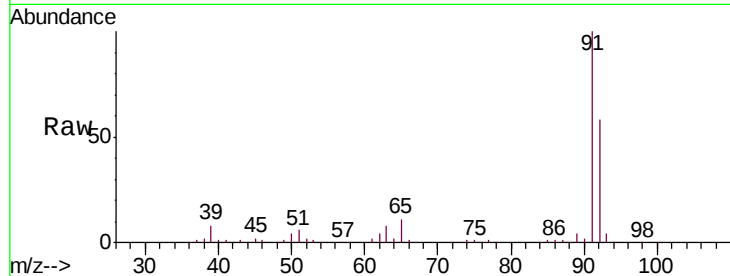
VSTD02068

Tgt Ion: 91 Resp: 697519

Ion Ratio Lower Upper

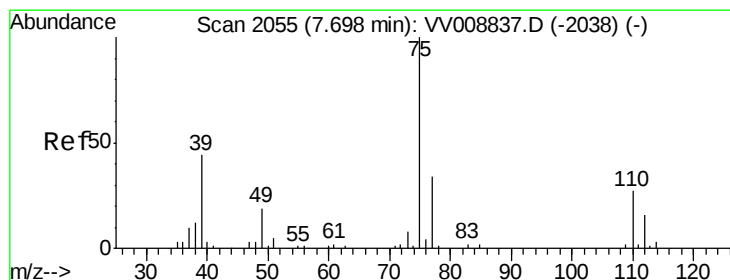
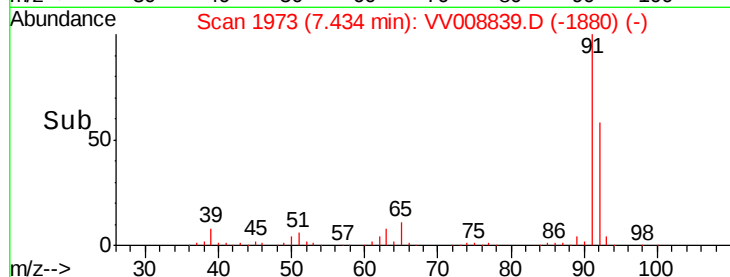
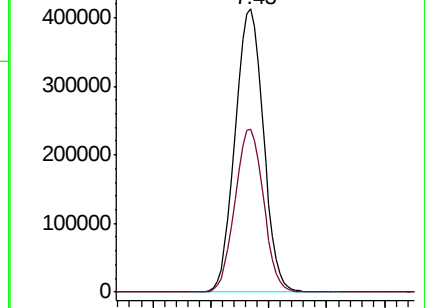
91 100

92 57.8 40.9 76.0



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0



#44

trans-1,3-Dichloropropene

Concen: 22.605 ug/L

RT: 7.69 min Scan# 2054

Delta R.T. -0.00 min

Lab File: VV008839.D

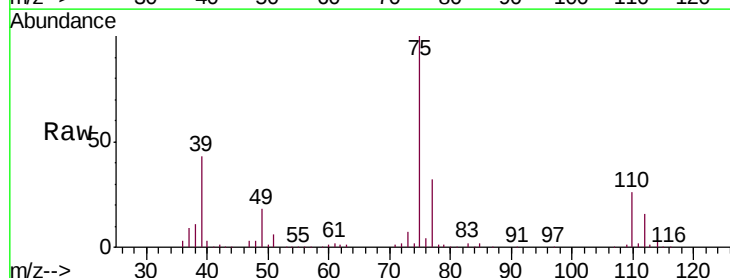
Acq: 05 Dec 2018 11:49

Tgt Ion: 75 Resp: 192172

Ion Ratio Lower Upper

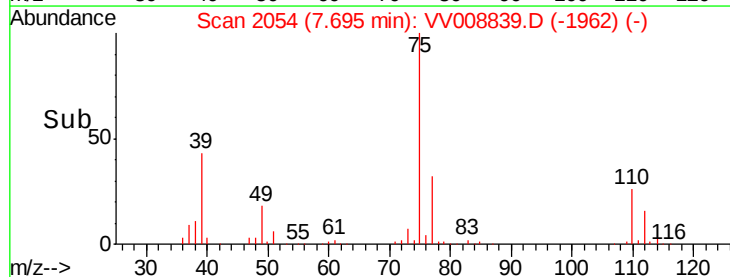
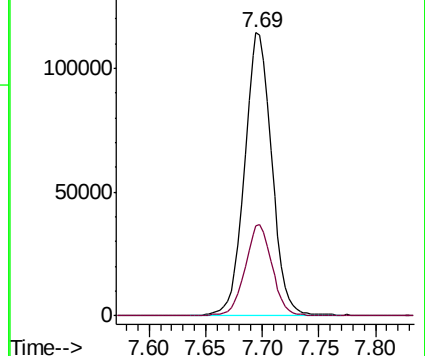
75 100

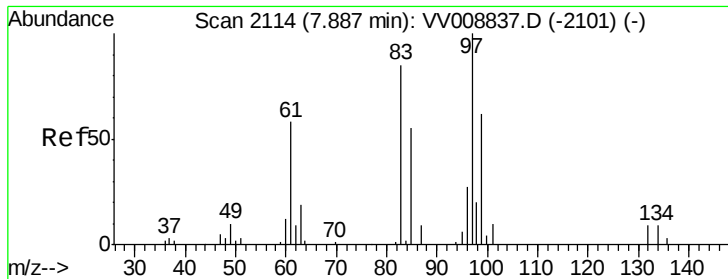
77 32.0 23.6 43.8



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

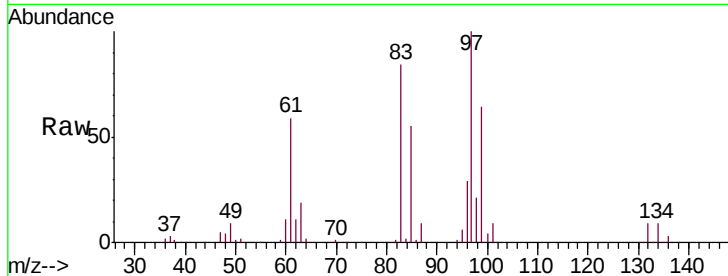




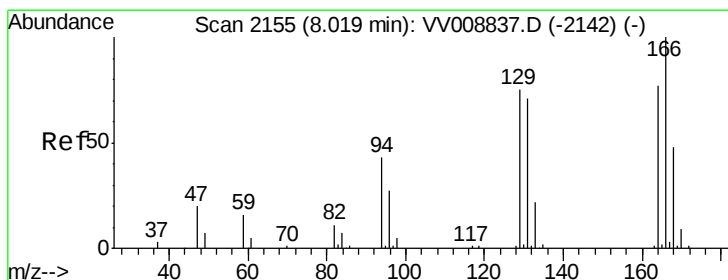
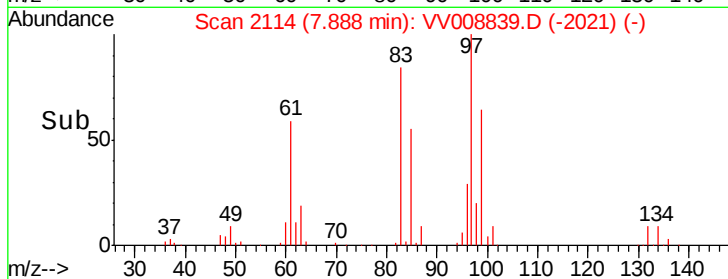
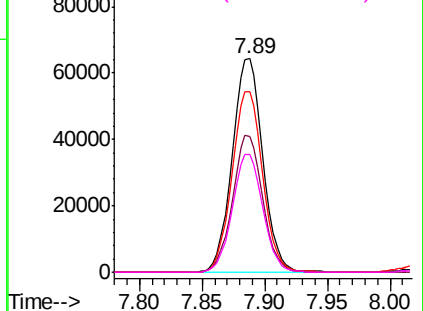
#45  
 1,1,2-Trichloroethane  
 Concen: 20.123 ug/L  
 RT: 7.89 min Scan# 2114  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02068

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 97    | Resp: | 108853 |
| Ion      | Ratio | Lower | Upper  |
| 97       | 100   |       |        |
| 99       | 63.6  | 43.3  | 80.3   |
| 83       | 84.3  | 59.4  | 110.2  |
| 85       | 55.3  | 38.5  | 71.5   |

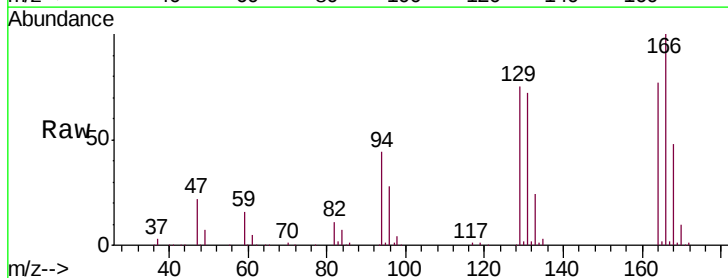


Abundance Ion 96.95 (96.65 to 97.65): VV0  
 Ion 99.05 (98.75 to 99.75): VV0  
 Ion 82.95 (82.65 to 83.65): VV0  
 Ion 85.00 (84.70 to 85.70): VV0

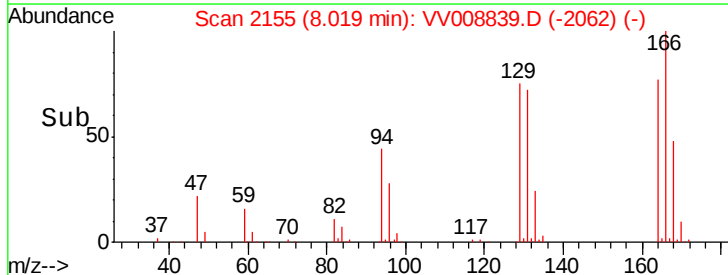
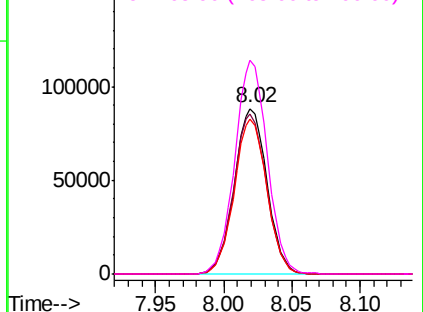


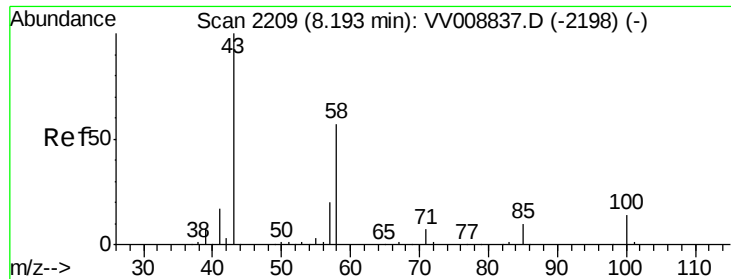
#47  
 Tetrachloroethene  
 Concen: 20.525 ug/L  
 RT: 8.02 min Scan# 2155  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 164   | Resp: | 146298 |
| Ion      | Ratio | Lower | Upper  |
| 164      | 100   |       |        |
| 129      | 96.5  | 68.8  | 127.8  |
| 131      | 93.4  | 64.8  | 120.4  |
| 166      | 129.2 | 91.5  | 169.9  |



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

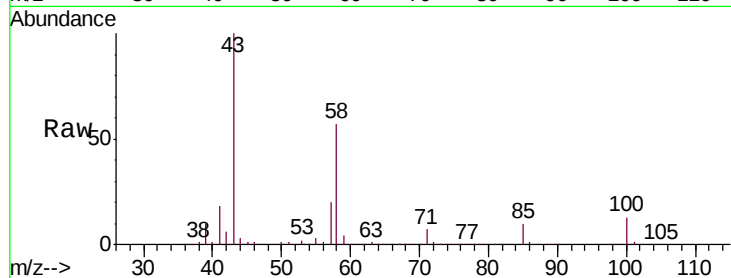




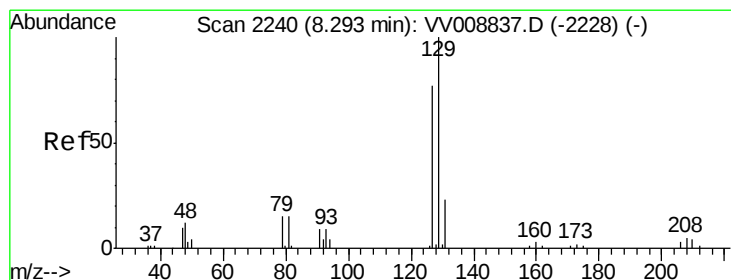
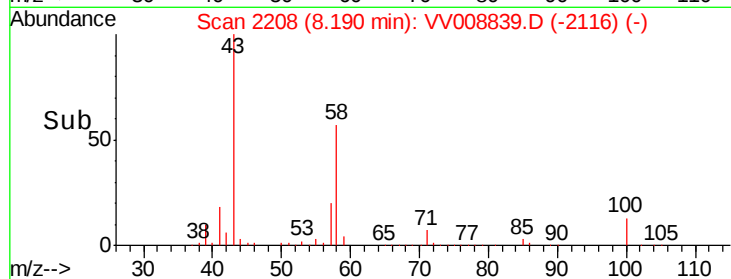
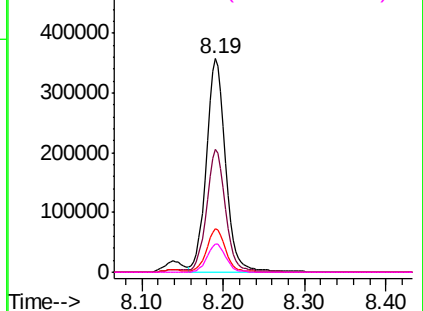
#48  
2-Hexanone  
Concen: 202.037 ug/L  
RT: 8.19 min Scan# 2208  
Delta R.T. -0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

Tgt Ion: 43 Resp: 589843  
Ion Ratio Lower Upper  
43 100  
58 56.7 44.4 66.6  
57 20.0 15.8 23.8  
100 13.2 10.9 16.3

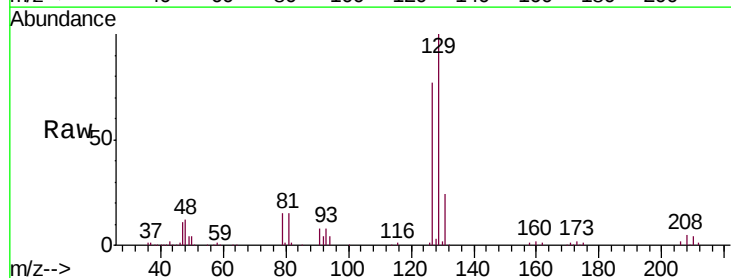


Abundance Ion 43.05 (42.75 to 43.75): VV0  
Ion 58.05 (57.75 to 58.75): VV0  
Ion 57.20 (56.90 to 57.90): VV0  
Ion 100.15 (99.85 to 100.85): VV0

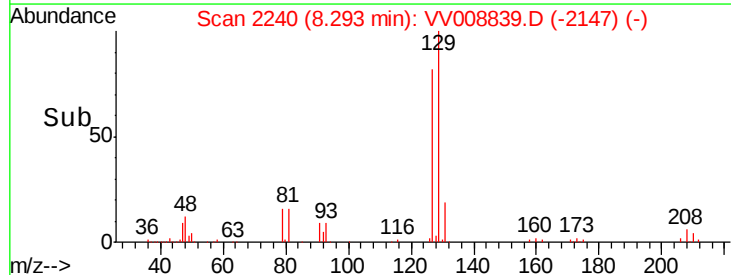
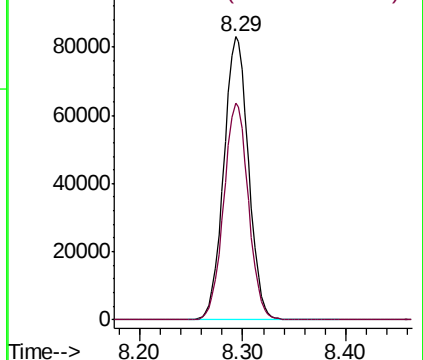


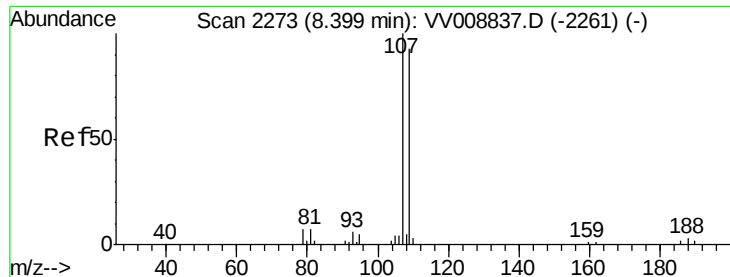
#49  
Dibromochloromethane  
Concen: 23.190 ug/L  
RT: 8.29 min Scan# 2240  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Tgt Ion: 129 Resp: 138859  
Ion Ratio Lower Upper  
129 100  
127 76.6 54.0 100.4



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

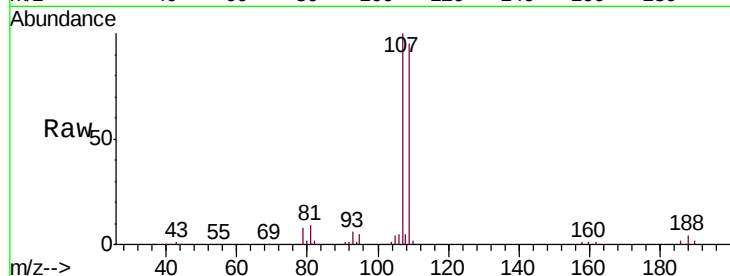




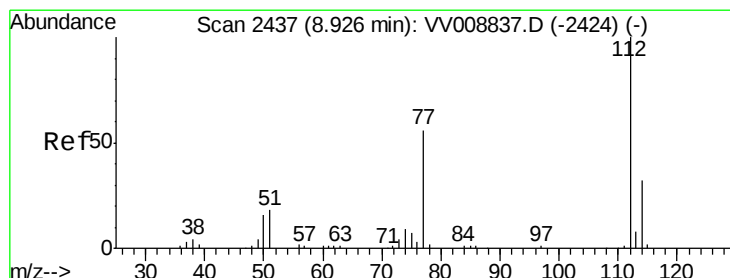
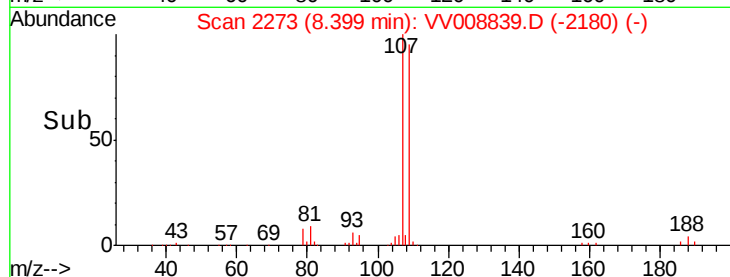
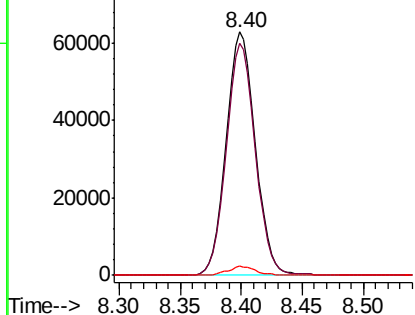
#50  
1,2-Dibromoethane  
Concen: 20.573 ug/L  
RT: 8.40 min Scan# 2273  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02068

Tgt Ion:107 Resp: 105449  
Ion Ratio Lower Upper  
107 100  
109 95.5 65.3 121.3  
188 3.6 2.5 3.7

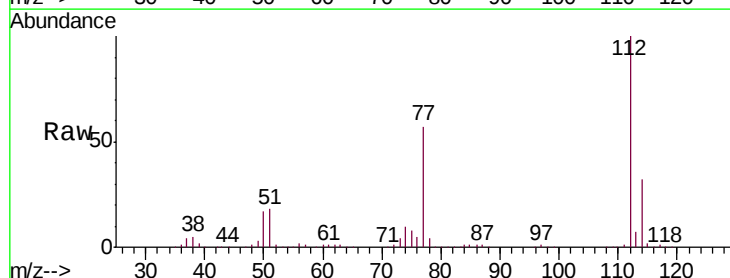


Abundance Ion 106.95 (106.65 to 107.65): V  
Ion 109.00 (108.70 to 109.70): V  
Ion 187.90 (187.60 to 188.60): V

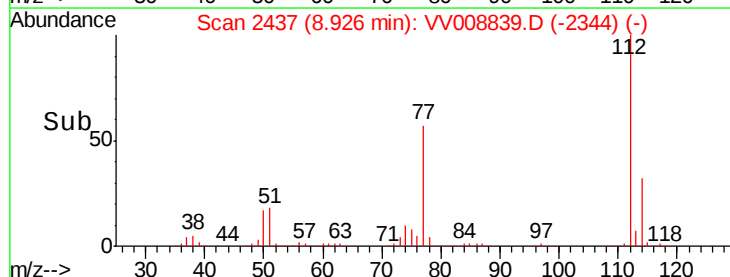
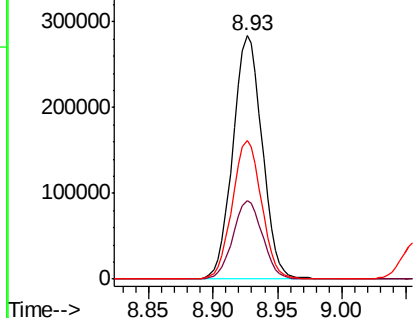


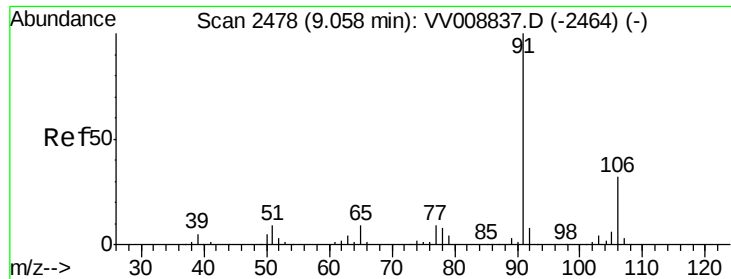
#51  
Chlorobenzene  
Concen: 19.857 ug/L  
RT: 8.93 min Scan# 2437  
Delta R.T. 0.00 min  
Lab File: VV008839.D  
Acq: 05 Dec 2018 11:49

Tgt Ion:112 Resp: 449588  
Ion Ratio Lower Upper  
112 100  
114 32.2 22.3 41.5  
77 56.8 45.2 67.8



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: 20.955 ug/L

RT: 9.06 min Scan# 2478

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

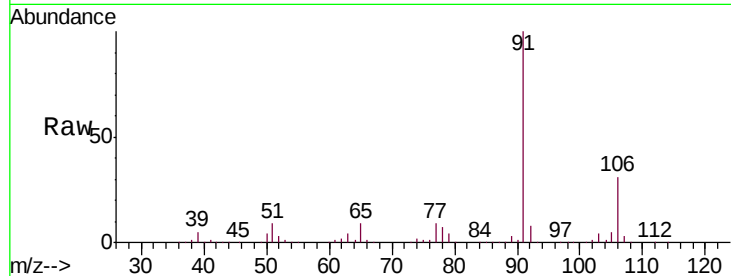
VSTD02068

Tgt Ion: 91 Resp: 779007

Ion Ratio Lower Upper

91 100

106 31.4 22.1 41.1



Abundance Ion 91.15 (90.85 to 91.85): VV008839.D (-2464) (-)

Ion 106.15 (105.85 to 106.85): VV008839.D (-2464) (-)

9.06

500000

400000

300000

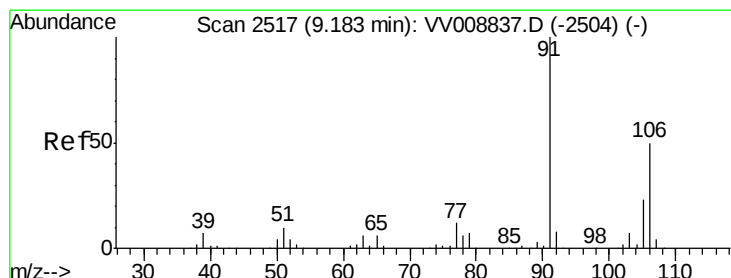
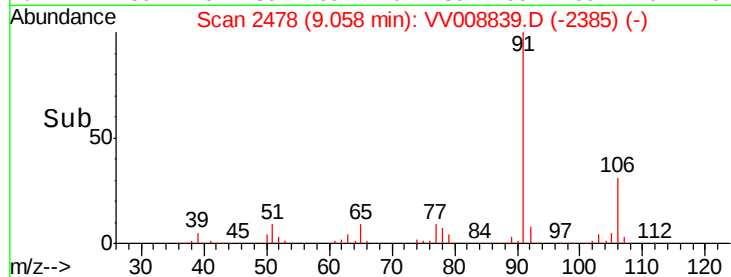
200000

100000

0

8.95 9.00 9.05 9.10 9.15

Time-->



#53

m,p-xylene

Concen: 21.451 ug/L

RT: 9.18 min Scan# 2517

Delta R.T. 0.00 min

Lab File: VV008839.D

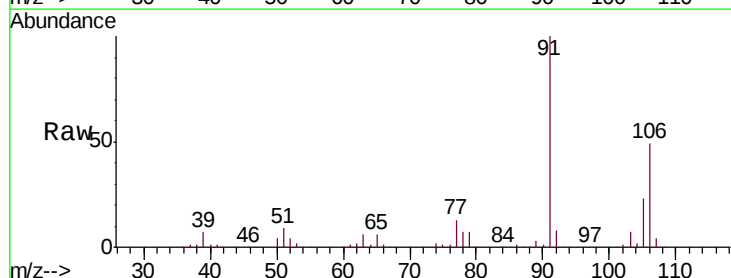
Acq: 05 Dec 2018 11:49

Tgt Ion: 106 Resp: 299835

Ion Ratio Lower Upper

106 100

91 203.7 141.9 263.5



Abundance Ion 106.15 (105.85 to 106.85): VV008839.D (-2504) (-)

Ion 91.15 (90.85 to 91.85): VV008839.D (-2504) (-)

9.18

400000

300000

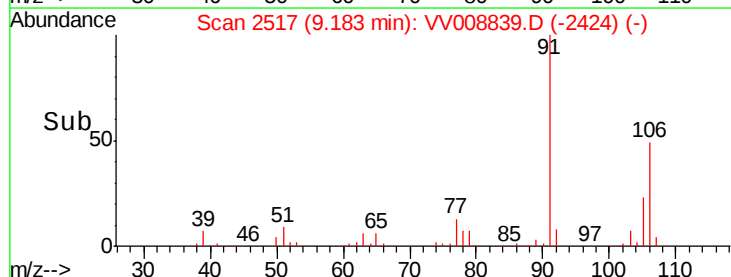
200000

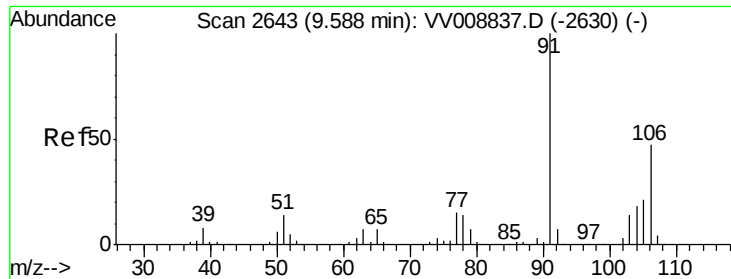
100000

0

9.10 9.15 9.20 9.25

Time-->





#54

o-xylene

Concen: 21.520 ug/L

RT: 9.59 min Scan# 2643

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

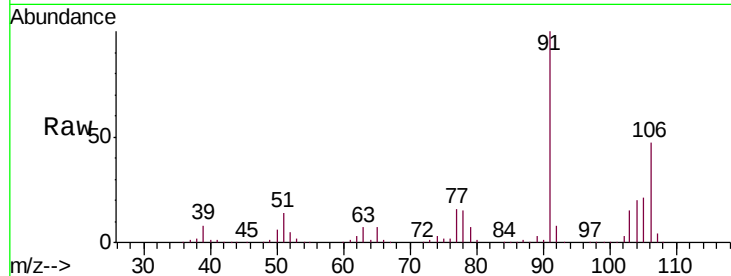
VSTD02068

Tgt Ion:106 Resp: 288739

Ion Ratio Lower Upper

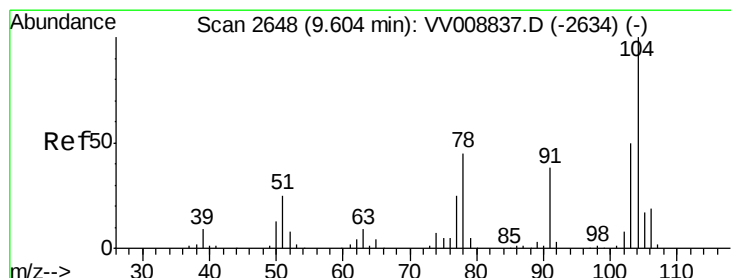
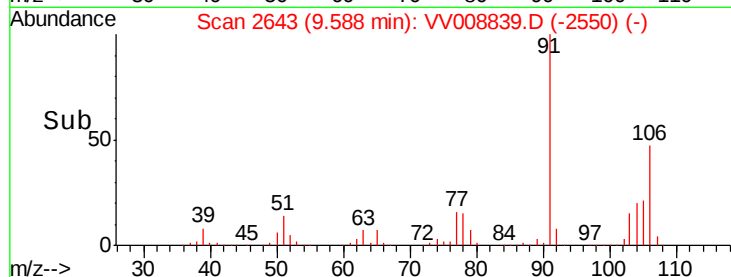
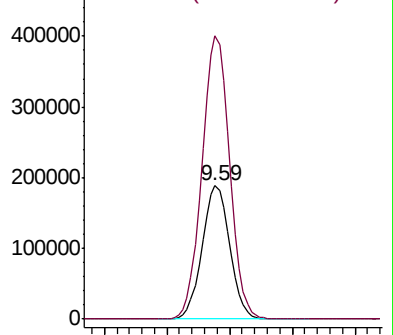
106 100

91 212.1 149.0 276.6



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#55

Styrene

Concen: 21.886 ug/L

RT: 9.60 min Scan# 2648

Delta R.T. 0.00 min

Lab File: VV008839.D

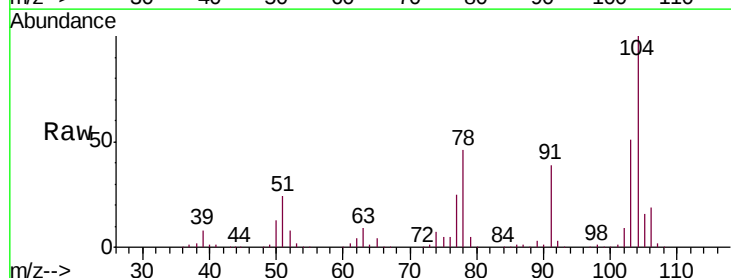
Acq: 05 Dec 2018 11:49

Tgt Ion:104 Resp: 490234

Ion Ratio Lower Upper

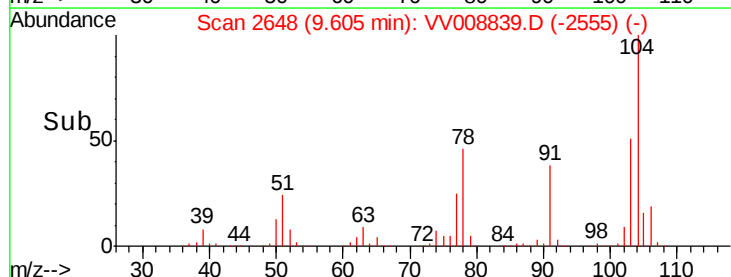
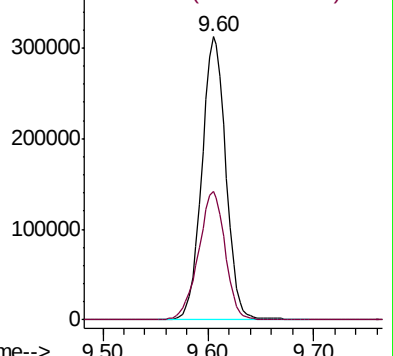
104 100

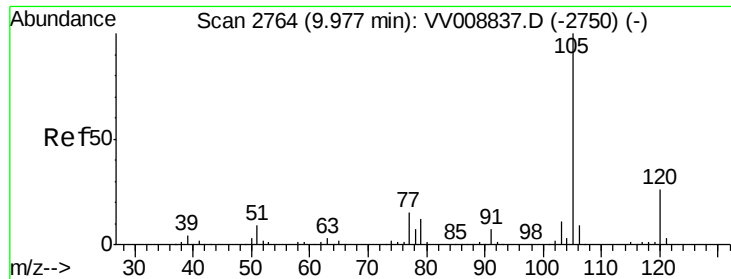
78 45.6 31.4 58.4



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VV0





#56

Isopropylbenzene

Concen: 21.338 ug/L

RT: 9.98 min Scan# 2764

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02068

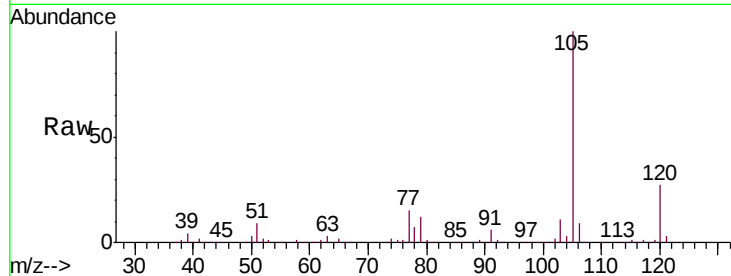
Tgt Ion:105 Resp: 781770

Ion Ratio Lower Upper

105 100

120 26.8 21.2 31.8

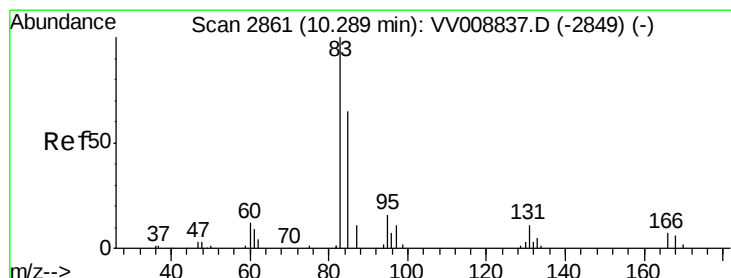
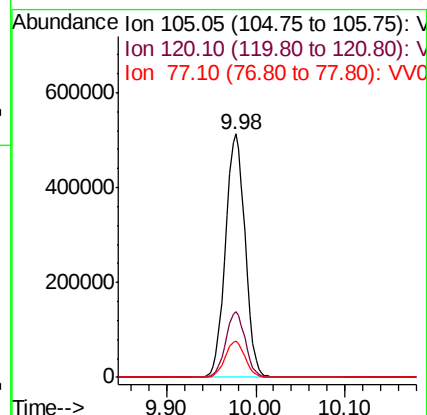
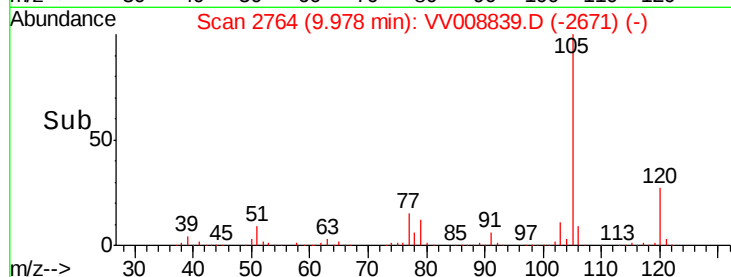
77 15.0 12.4 18.6



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: 21.020 ug/L

RT: 10.29 min Scan# 2861

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

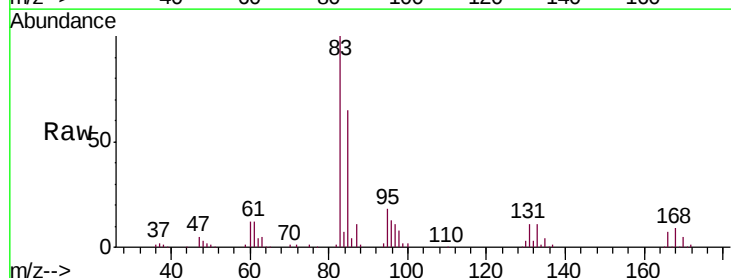
Tgt Ion: 83 Resp: 120322

Ion Ratio Lower Upper

83 100

85 65.3 45.8 85.0

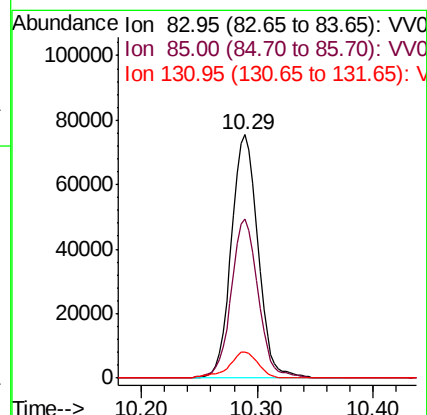
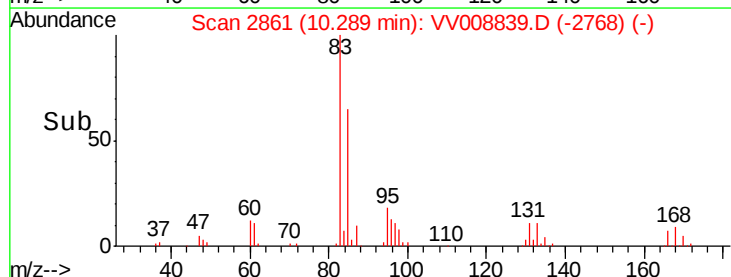
131 10.8 9.6 14.4

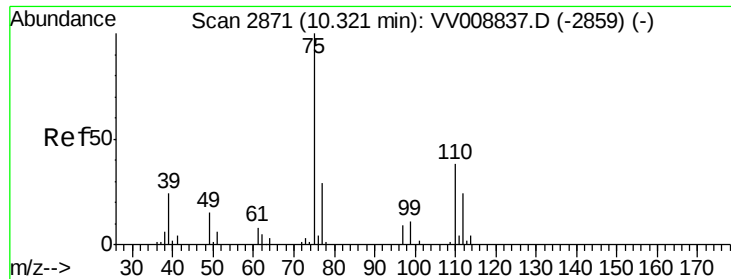


Abundance Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0

Ion 130.95 (130.65 to 131.65): V





#59

1,2,3-Trichloropropane

Concen: 19.641 ug/L

RT: 10.32 min Scan# 2871

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

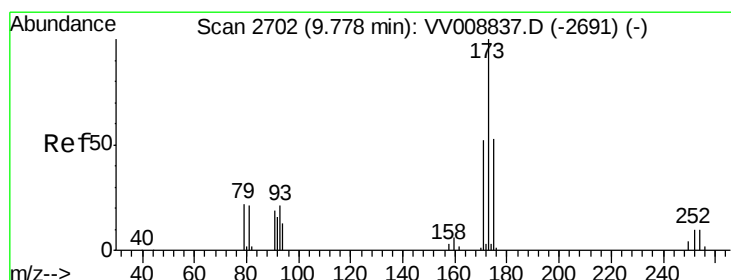
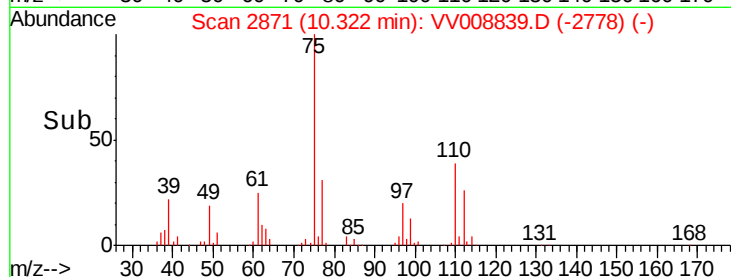
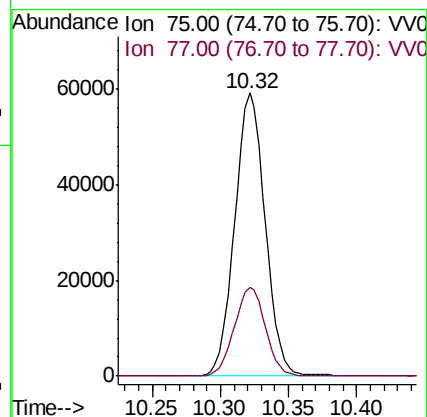
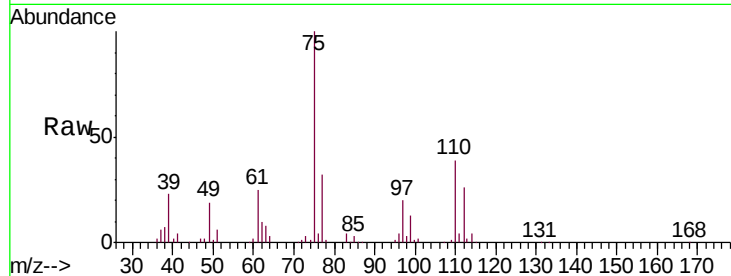
VSTD02068

Tgt Ion: 75 Resp: 91976

Ion Ratio Lower Upper

75 100

77 32.0 24.8 37.2



#61

Bromoform

Concen: 23.359 ug/L

RT: 9.78 min Scan# 2702

Delta R.T. 0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

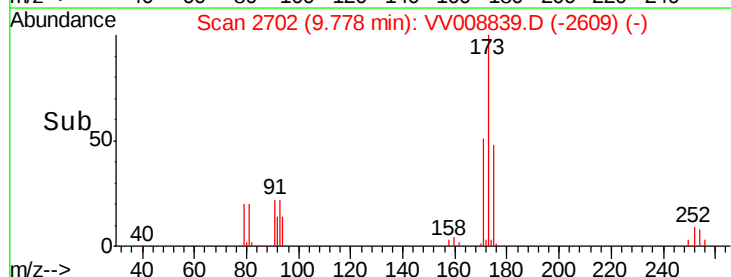
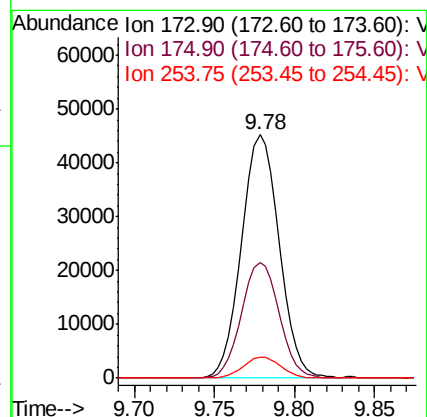
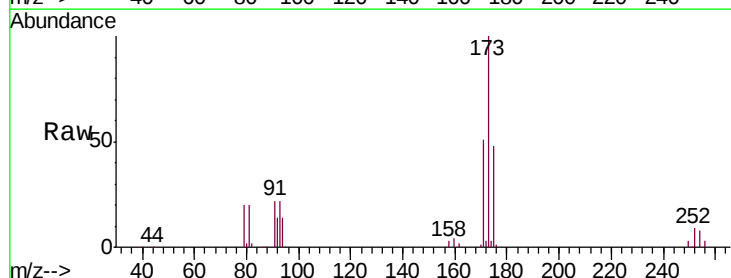
Tgt Ion: 173 Resp: 72773

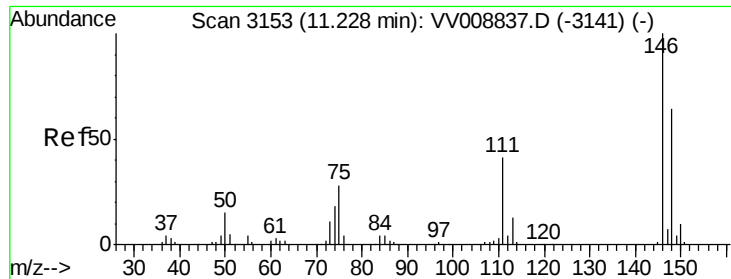
Ion Ratio Lower Upper

173 100

175 47.6 40.2 60.4

254 8.6 7.0 10.6

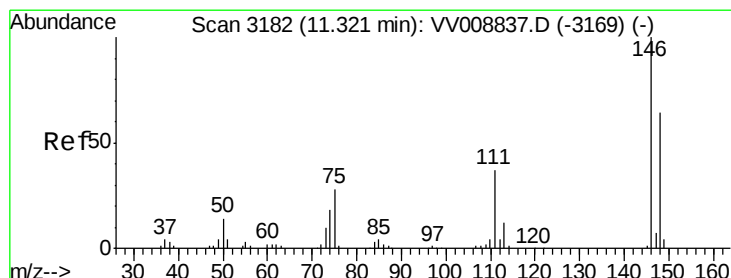
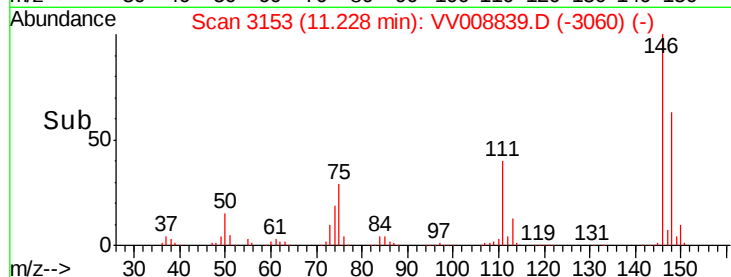
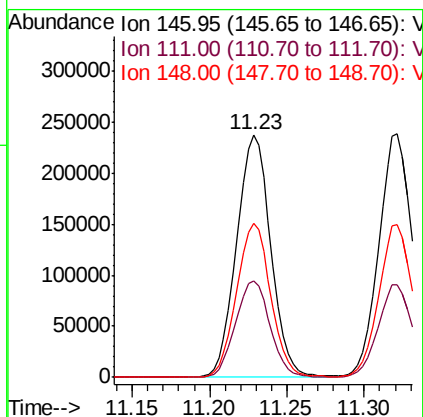
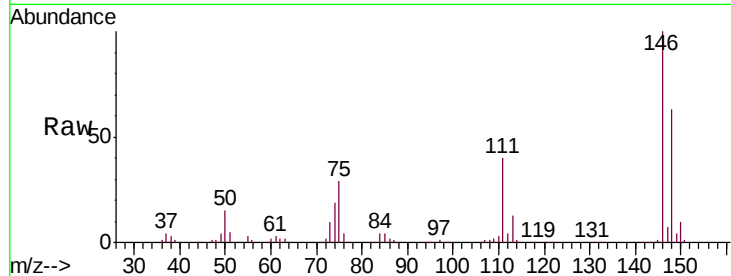




#62  
 1,3-Dichlorobenzene  
 Concen: 19.824 ug/L  
 RT: 11.23 min Scan# 3153  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

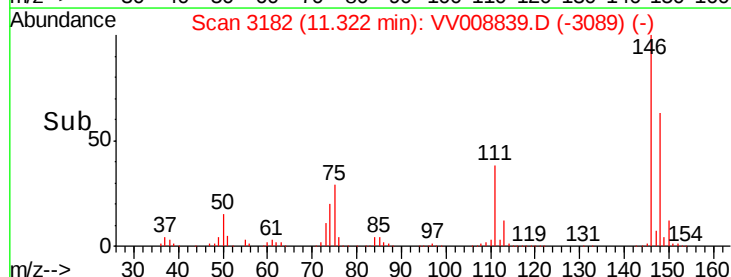
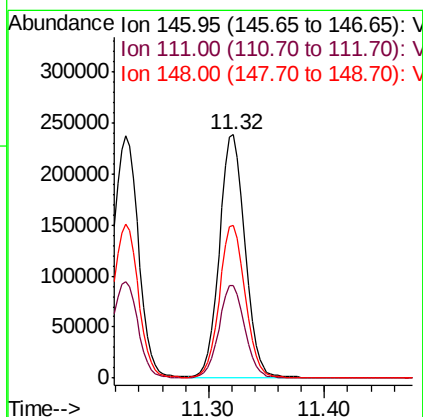
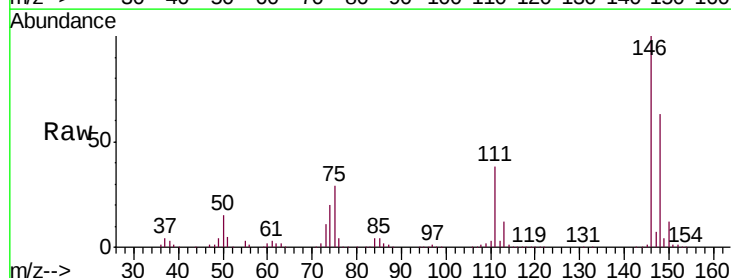
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02068

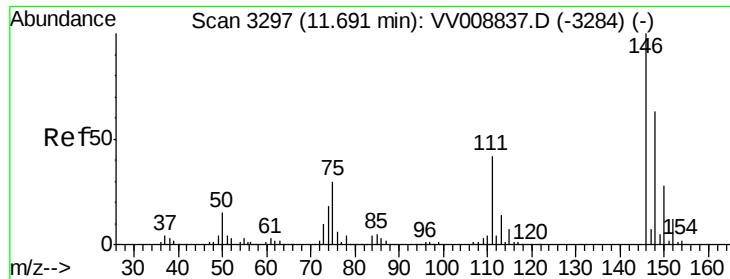
Tgt Ion:146 Resp: 365921  
 Ion Ratio Lower Upper  
 146 100  
 111 39.9 28.5 52.9  
 148 63.4 45.0 83.6



#63  
 1,4-Dichlorobenzene  
 Concen: 19.933 ug/L  
 RT: 11.32 min Scan# 3182  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Tgt Ion:146 Resp: 366639  
 Ion Ratio Lower Upper  
 146 100  
 111 38.3 26.2 48.8  
 148 62.9 44.7 82.9

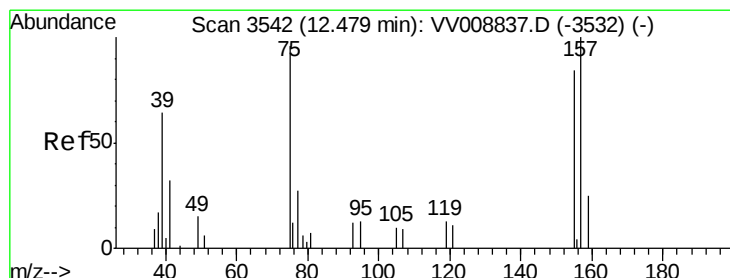
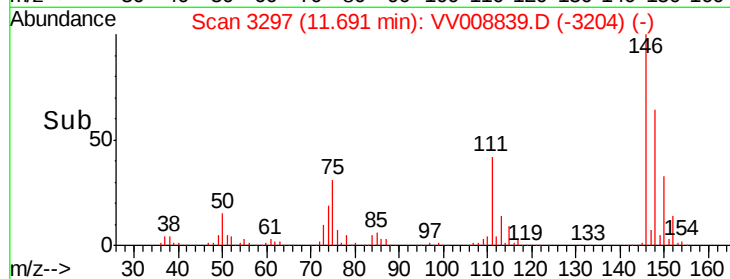
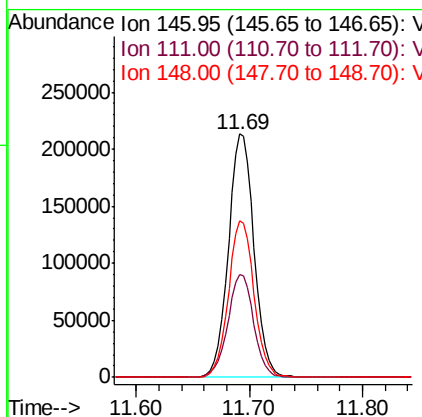
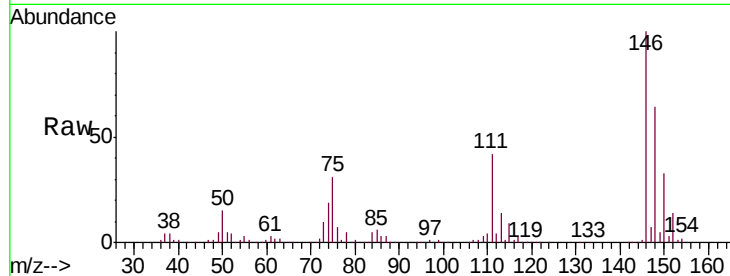




#65  
 1,2-Dichlorobenzene  
 Concen: 19.166 ug/L  
 RT: 11.69 min Scan# 3297  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

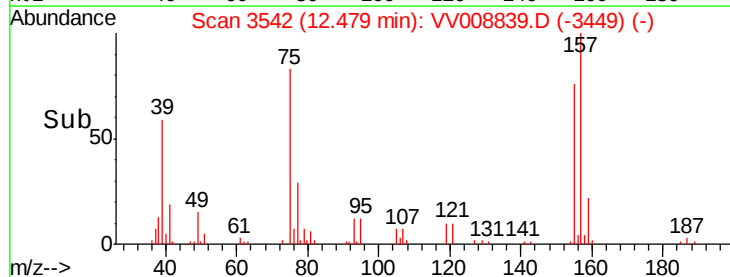
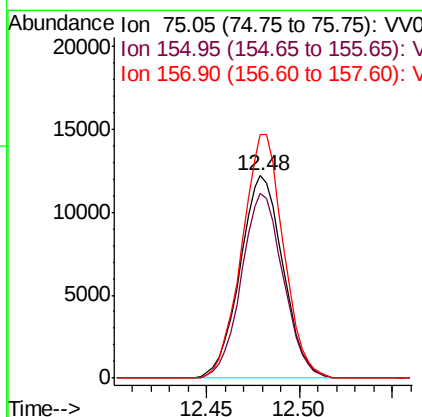
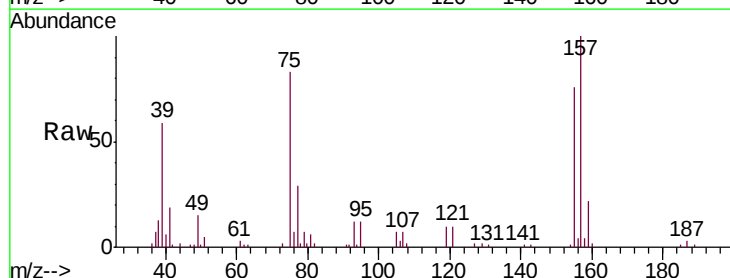
Instrument :  
 MSVOA\_V  
 ClientSampled :  
 VSTD02068

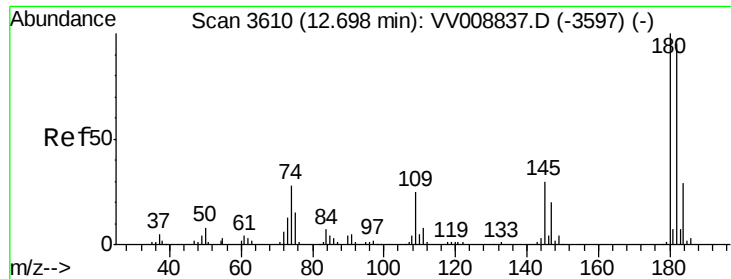
Tgt Ion: 146 Resp: 334794  
 Ion Ratio Lower Upper  
 146 100  
 111 42.1 33.8 50.6  
 148 64.2 50.0 75.0



#66  
 1,2-Dibromo-3-chloropropane  
 Concen: 22.786 ug/L  
 RT: 12.48 min Scan# 3542  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

Tgt Ion: 75 Resp: 19627  
 Ion Ratio Lower Upper  
 75 100  
 155 91.5 70.2 105.4  
 157 120.3 83.4 125.2

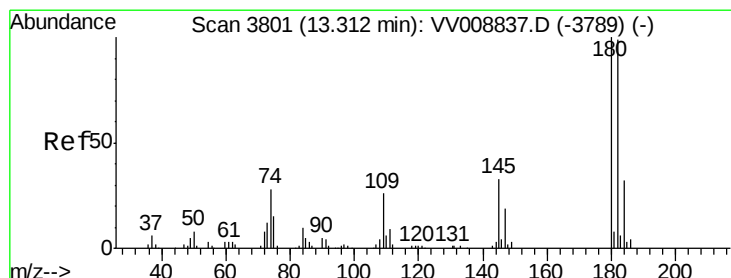
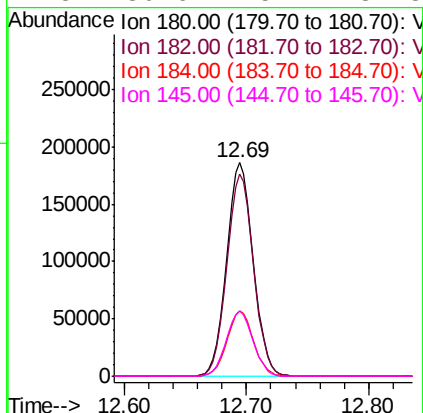
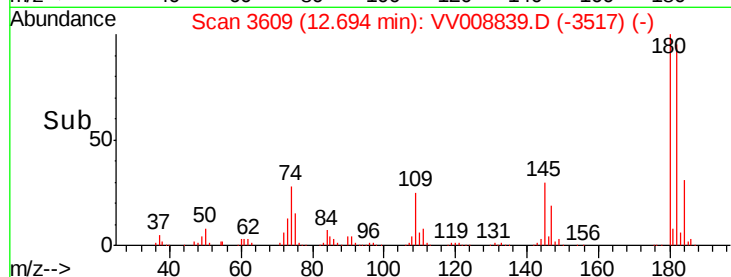
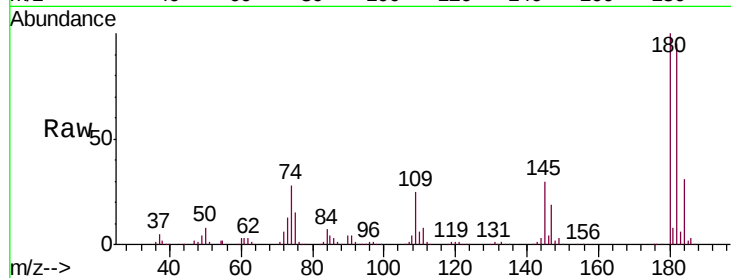




#67  
 1,3,5-Trichlorobenzene  
 Concen: 20.932 ug/L  
 RT: 12.69 min Scan# 3609  
 Delta R.T. -0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

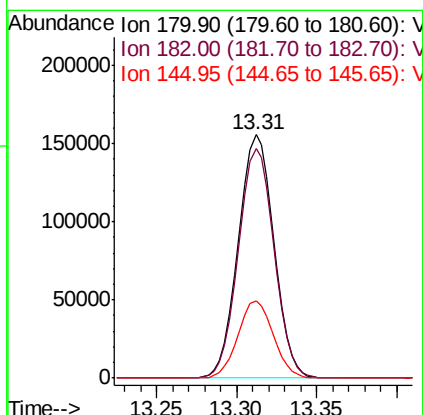
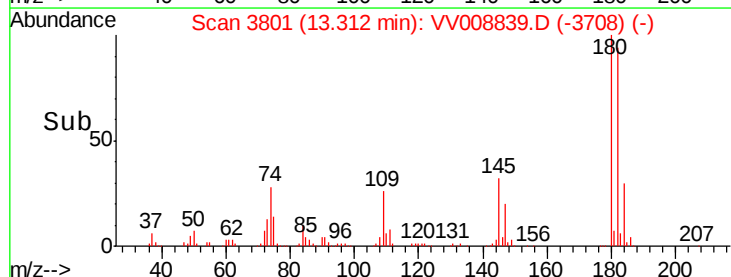
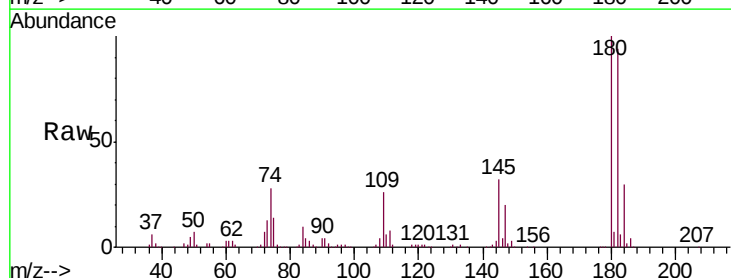
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02068

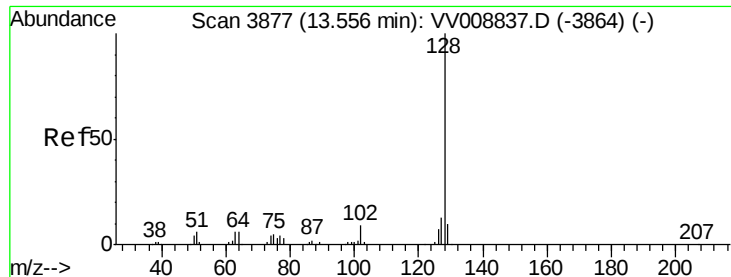
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 94.7  | 76.5  | 114.7 |
| 184     | 30.4  | 24.3  | 36.5  |
| 145     | 30.6  | 25.2  | 37.8  |



#68  
 1,2,4-trichlorobenzene  
 Concen: 23.437 ug/L  
 RT: 13.31 min Scan# 3801  
 Delta R.T. 0.00 min  
 Lab File: VV008839.D  
 Acq: 05 Dec 2018 11:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 94.8  | 76.2  | 114.4 |
| 145     | 31.5  | 26.2  | 39.4  |





#69

Naphthalene

Concen: 25.844 ug/L

RT: 13.55 min Scan# 3876

Delta R.T. -0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

Instrument :

MSVOA\_V

ClientSampleId :

VSTD02068

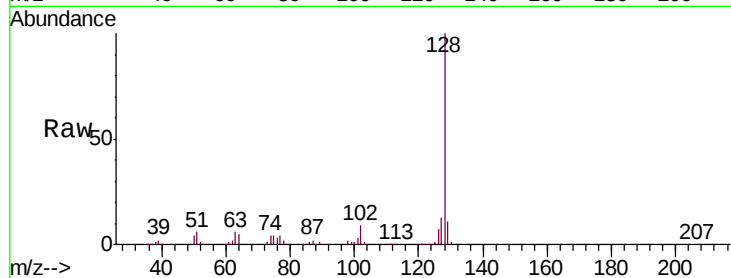
Tgt Ion:128 Resp: 380689

Ion Ratio Lower Upper

128 100

129 10.9 8.6 12.8

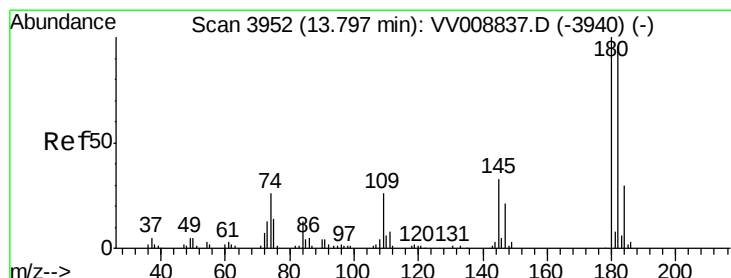
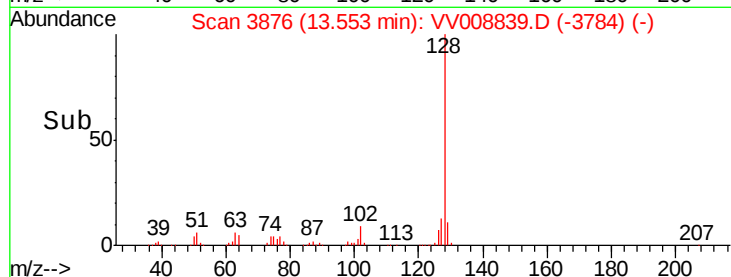
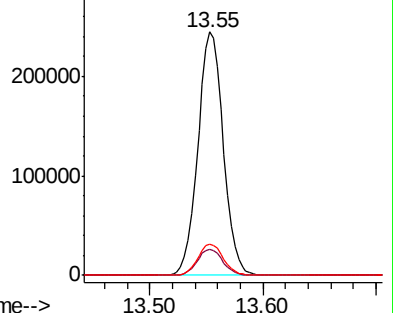
127 12.8 10.6 15.8



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: 22.615 ug/L

RT: 13.79 min Scan# 3951

Delta R.T. -0.00 min

Lab File: VV008839.D

Acq: 05 Dec 2018 11:49

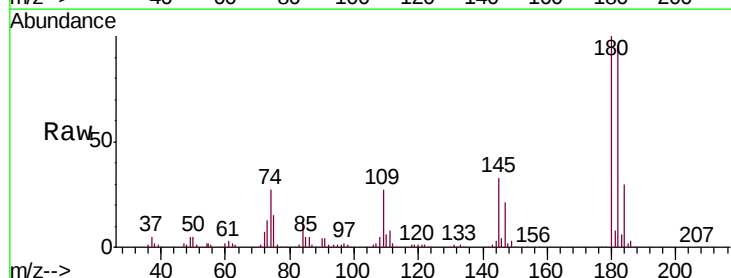
Tgt Ion:180 Resp: 212857

Ion Ratio Lower Upper

180 100

182 95.0 77.8 116.8

145 32.8 26.6 40.0



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

