

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX041619\  
 Data File : VX008988.D  
 Acq On : 16 Apr 2019 15:28  
 Operator : JC/SP  
 Sample : K2425-01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TB-01-190415

Quant Time: Apr 17 04:17:57 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X041519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 16 09:35:21 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 259203   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 414728   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 367981   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 158239   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |       |     |          |       |        |      |
|---------------------------|-------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06  | 65  | 167175   | 45.76 | ug/l   | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 91.52% |      |
| 35) Dibromofluoromethane  | 5.50  | 113 | 123395   | 46.36 | ug/l   | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 92.72% |      |
| 50) Toluene-d8            | 8.71  | 98  | 518211   | 48.82 | ug/l   | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 97.64% |      |
| 62) 4-Bromofluorobenzene  | 11.13 | 95  | 178192   | 47.56 | ug/l   | 0.00 |
| Spiked Amount             |       |     | Recovery | =     | 95.12% |      |

## Target Compounds

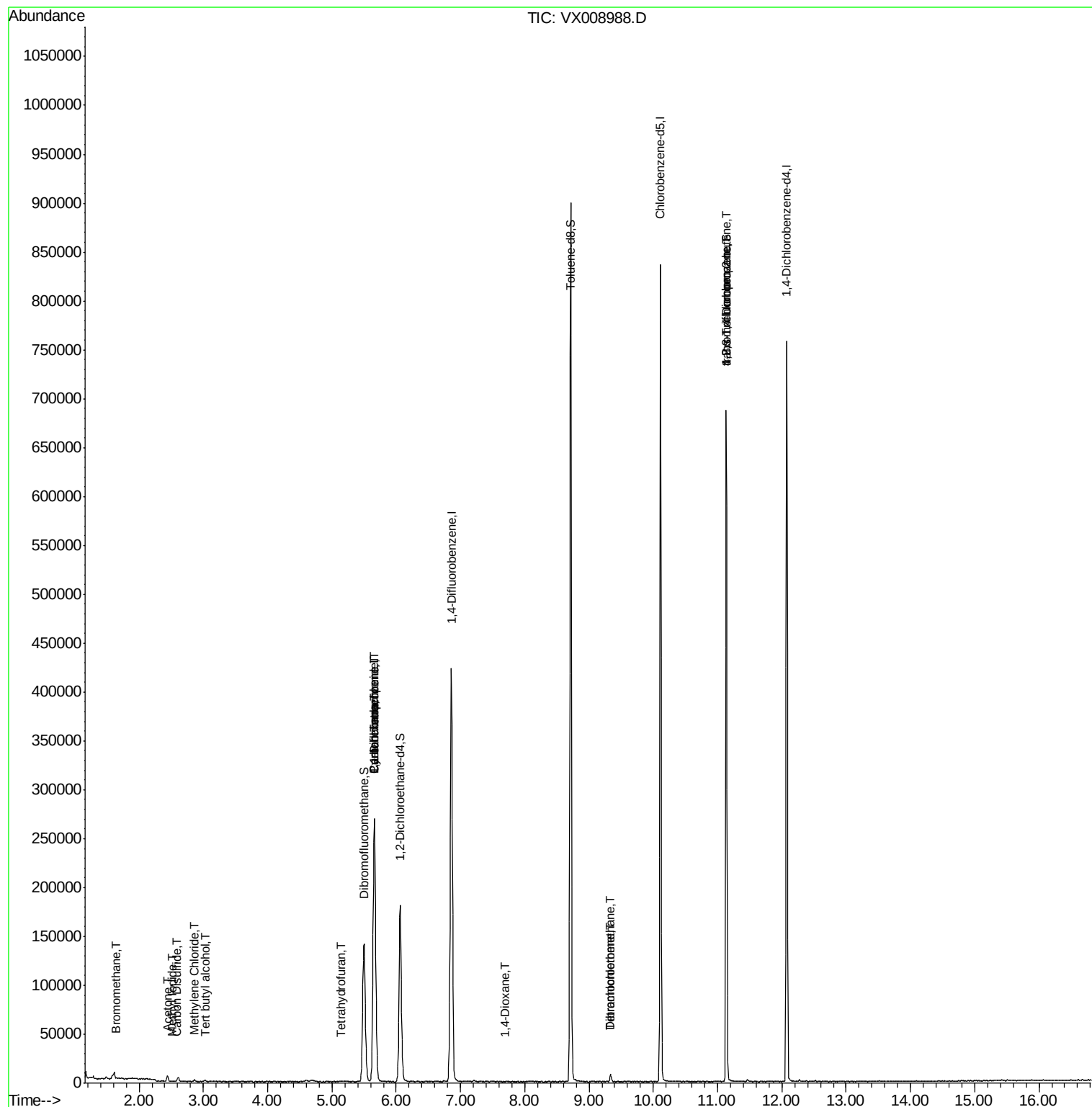
|                                |       |     |       |               | Qvalue |
|--------------------------------|-------|-----|-------|---------------|--------|
| 5) Bromomethane                | 1.65  | 94  | 235   | 3.945 ug/l #  | 52     |
| 10) Methyl Iodide              | 2.51  | 142 | 44    | 4.428 ug/l #  | 42     |
| 11) Tert butyl alcohol         | 3.02  | 59  | 1023  | 1.262 ug/l #  | 72     |
| 16) Acetone                    | 2.44  | 43  | 6432  | 3.395 ug/l    | 94     |
| 17) Carbon Disulfide           | 2.58  | 76  | 476   | 1.309 ug/l #  | 75     |
| 20) Methylene Chloride         | 2.86  | 84  | 874   | 0.270 ug/l    | 87     |
| 28) Bromochloromethane         | 5.01  | 49  | 93    | Below Cal #   | 21     |
| 29) Tetrahydrofuran            | 5.13  | 42  | 1139  | 0.562 ug/l #  | 40     |
| 31) Cyclohexane                | 5.66  | 56  | 5948  | 1.022 ug/l #  | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75  | 20689 | 4.824 ug/l #  | 50     |
| 38) Carbon Tetrachloride       | 5.66  | 117 | 25464 | 7.003 ug/l #  | 17     |
| 49) 1,4-Dioxane                | 7.69  | 88  | 27    | 0.328 ug/l #  | 21     |
| 60) Dibromochloromethane       | 9.34  | 129 | 1288  | 0.447 ug/l #  | 10     |
| 64) Tetrachloroethene          | 9.34  | 164 | 1193  | 0.427 ug/l #  | 89     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 90204 | 23.345 ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 90204 | 59.934 ug/l # | 11     |

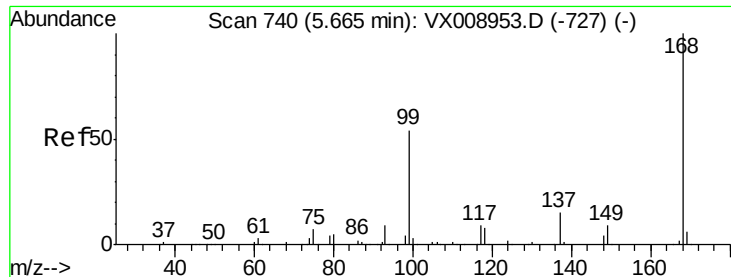
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX041619\  
Data File : VX008988.D  
Acq On : 16 Apr 2019 15:28  
Operator : JC/SP  
Sample : K2425-01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-01-190415

Quant Time: Apr 17 04:17:57 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X041519W.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 16 09:35:21 2019  
Response via : Initial Calibration

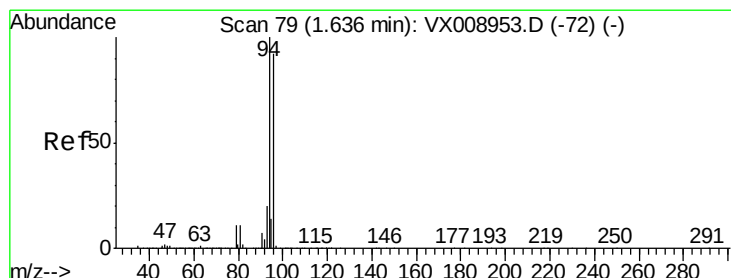
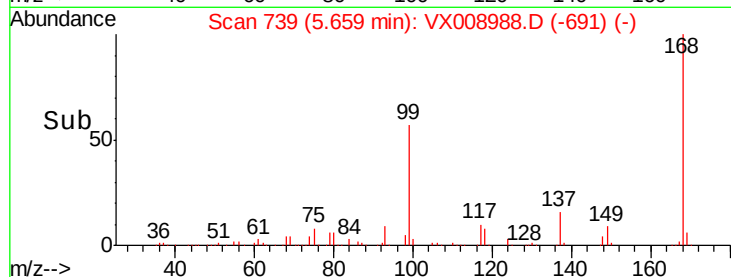
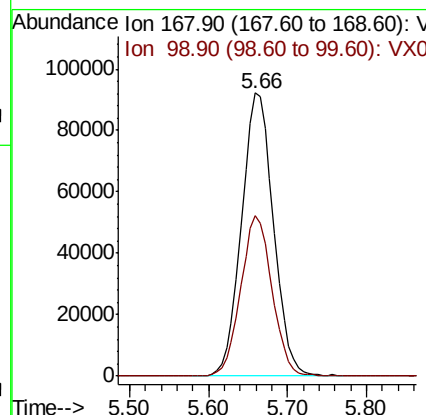
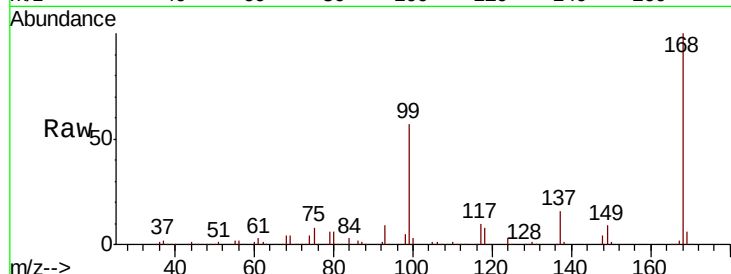




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.01 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

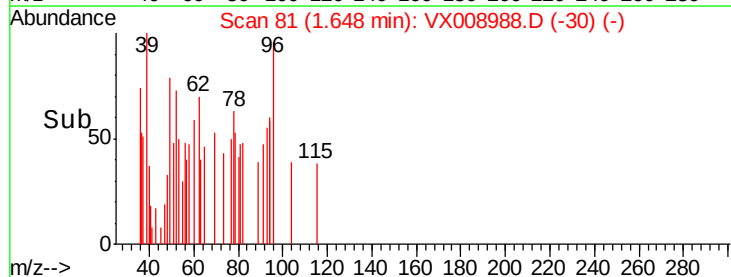
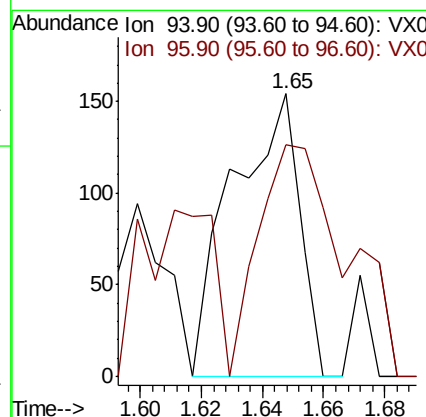
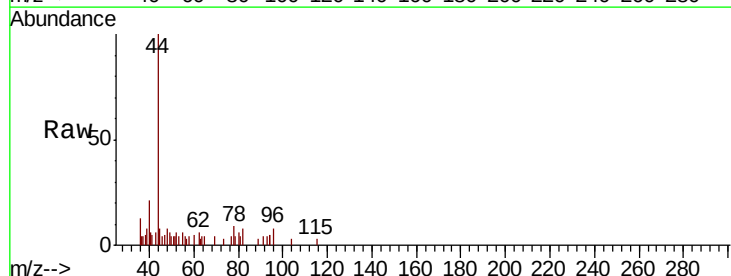
Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-01-190415

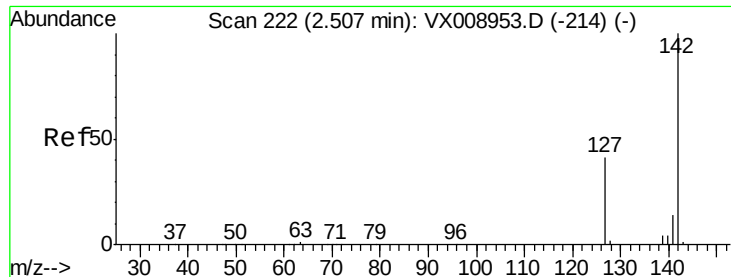
Tot Ion:168 Resp: 259203  
Ion Ratio Lower Upper  
168 100  
99 56.6 43.0 64.6



#5  
Bromomethane  
Concen: 3.945 ug/l  
RT: 1.65 min Scan# 81  
Delta R.T. 0.01 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

Tgt Ion: 94 Resp: 235  
Ion Ratio Lower Upper  
94 100  
96 46.8 73.9 110.9#

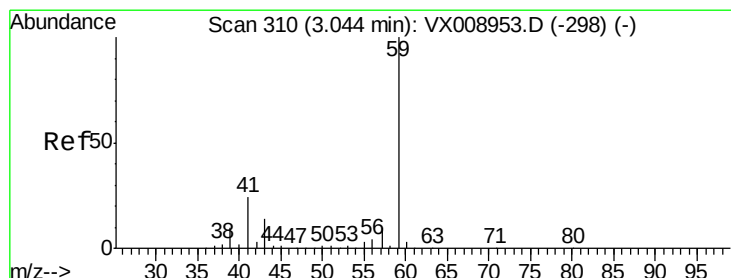
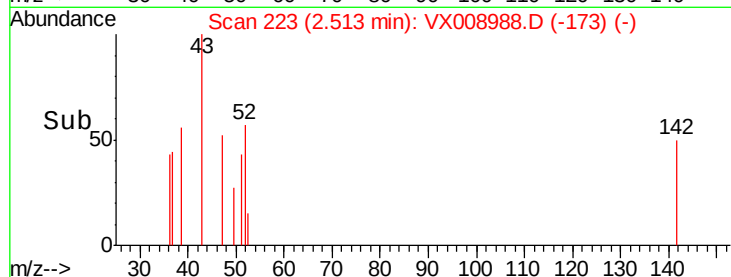
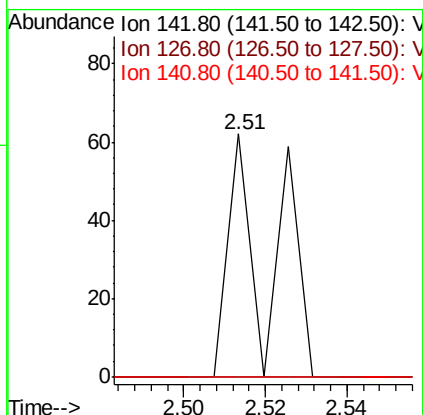
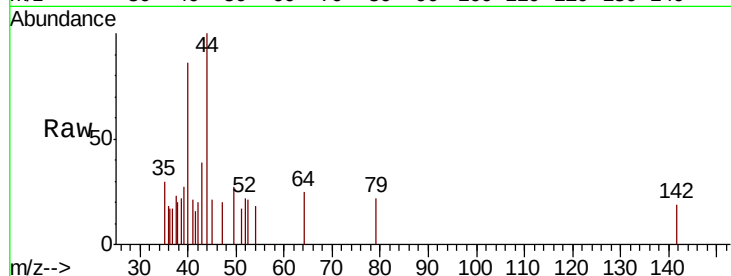




#10  
Methyl Iodide  
Concen: 4.428 ug/l  
RT: 2.51 min Scan# 223  
Delta R.T. 0.01 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

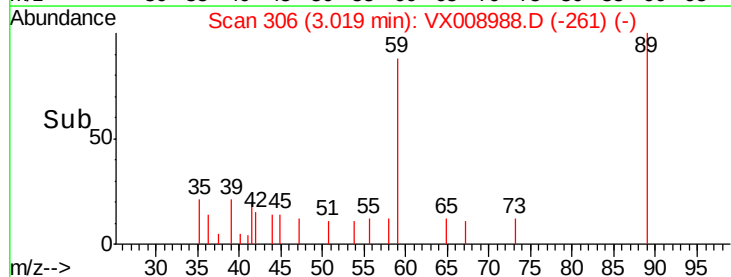
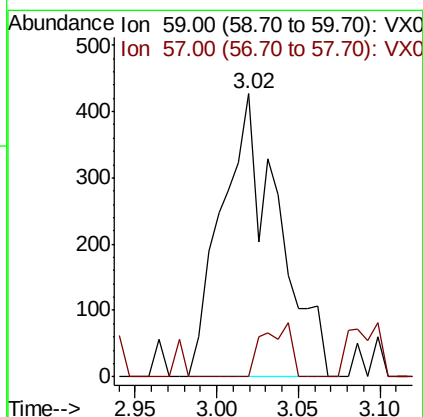
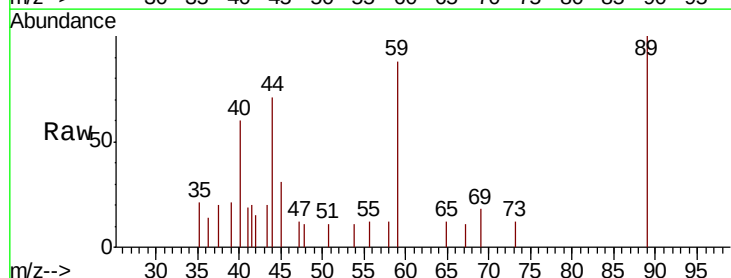
Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-01-190415

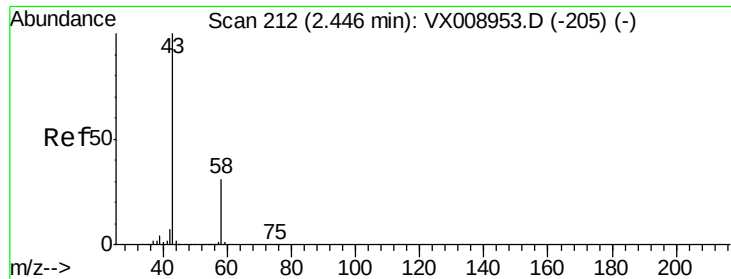
Tot Ion:142 Resp: 44  
Ion Ratio Lower Upper  
142 100  
127 0.0 32.8 49.2#  
141 0.0 11.4 17.2#



#11  
Tert butyl alcohol  
Concen: 1.262 ug/l  
RT: 3.02 min Scan# 306  
Delta R.T. -0.02 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

Tgt Ion: 59 Resp: 1023  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.4 12.6#

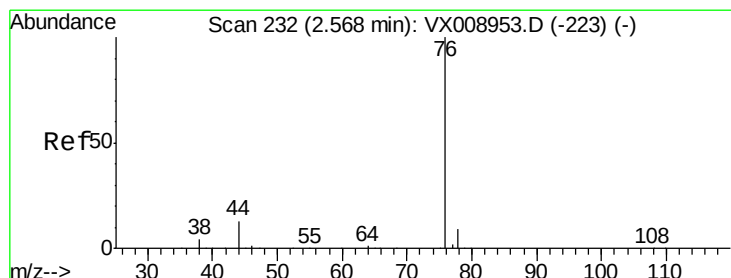
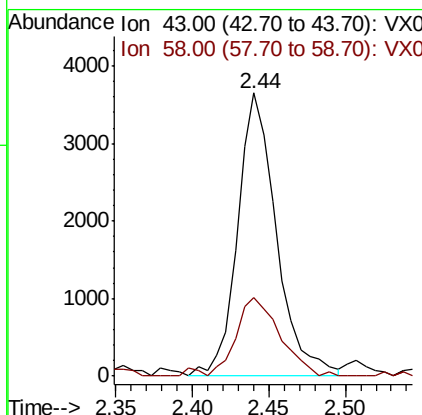
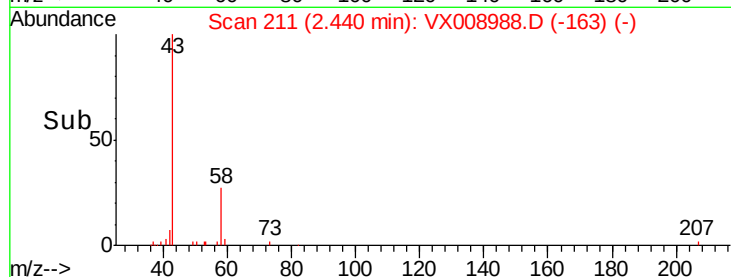
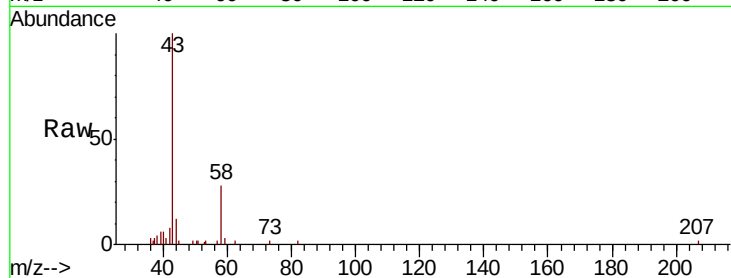




#16  
Acetone  
Concen: 3.395 ug/l  
RT: 2.44 min Scan# 211  
Delta R.T. -0.01 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

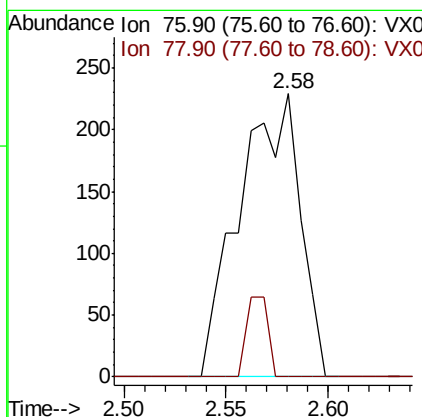
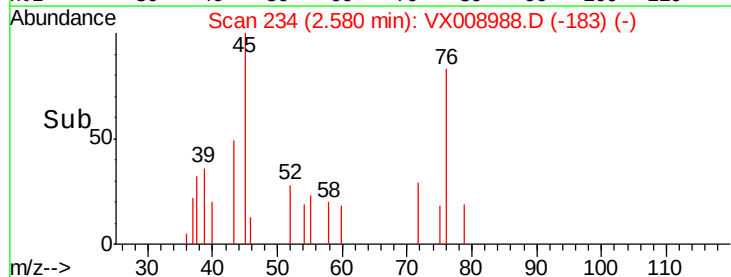
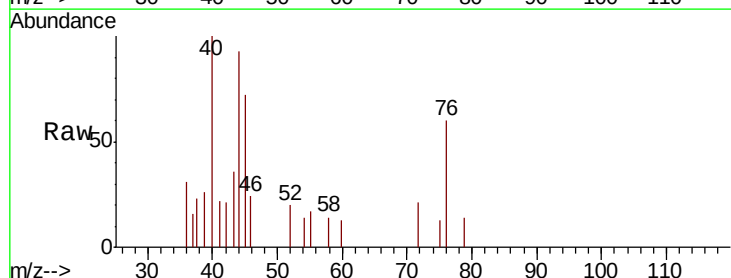
Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-01-190415

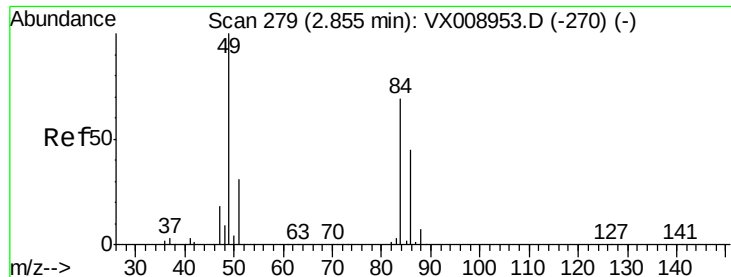
Tot Ion: 43 Resp: 6432  
Ion Ratio Lower Upper  
43 100  
58 27.9 24.8 37.2



#17  
Carbon Disulfide  
Concen: 1.309 ug/l  
RT: 2.58 min Scan# 234  
Delta R.T. 0.01 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

Tgt Ion: 76 Resp: 476  
Ion Ratio Lower Upper  
76 100  
78 0.0 7.2 10.8#

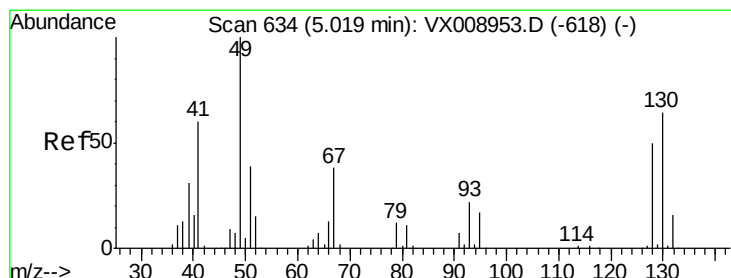
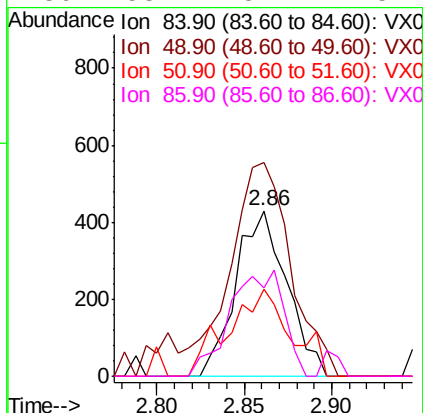
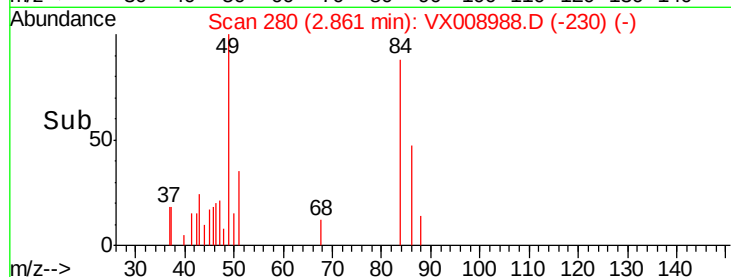
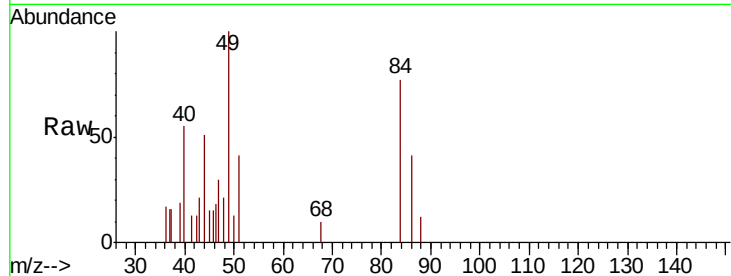




#20  
Methylene Chloride  
Concen: 0.270 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.01 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

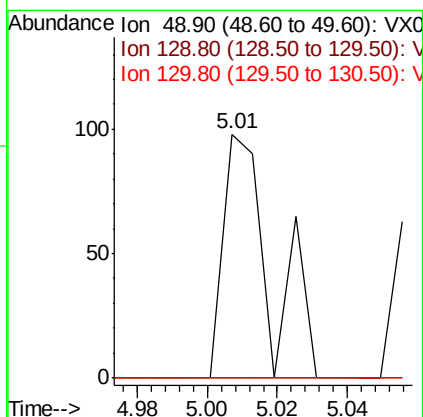
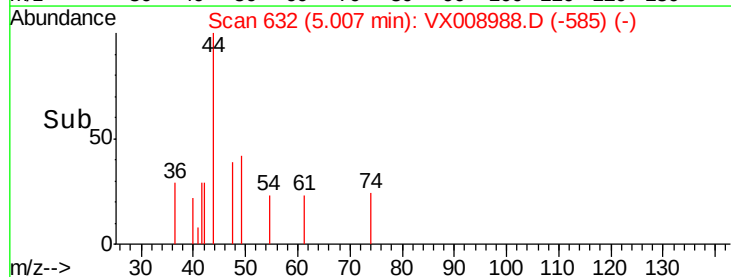
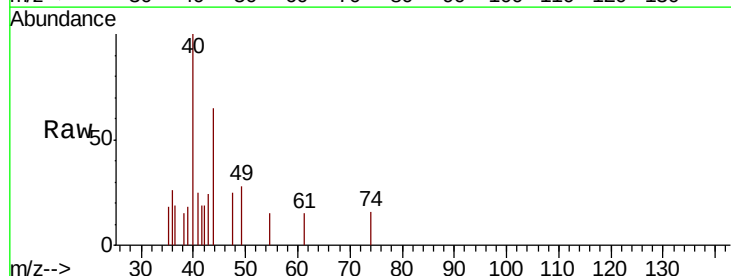
Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-01-190415

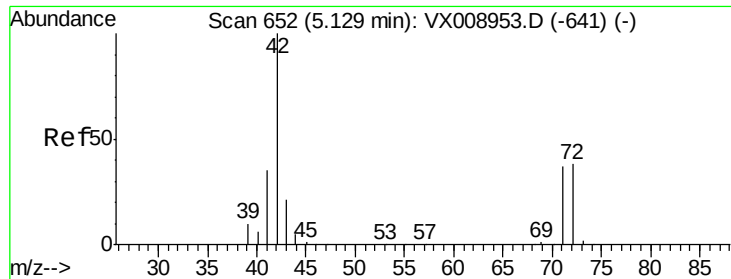
| Tot Ion: | 84    | Resp: | 874   |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 129.4 | 115.4 | 173.0 |
| 51       | 52.4  | 35.8  | 53.6  |
| 86       | 53.1  | 52.1  | 78.1  |



#28  
Bromochloromethane  
Concen: Below Cal  
RT: 5.01 min Scan# 632  
Delta R.T. -0.01 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

| Tgt Ion: | 49    | Resp: | 93    |
|----------|-------|-------|-------|
| Ion      | Ratio | Lower | Upper |
| 49       | 100   |       |       |
| 129      | 0.0   | 0.0   | 3.6   |
| 130      | 0.0   | 50.4  | 75.6# |

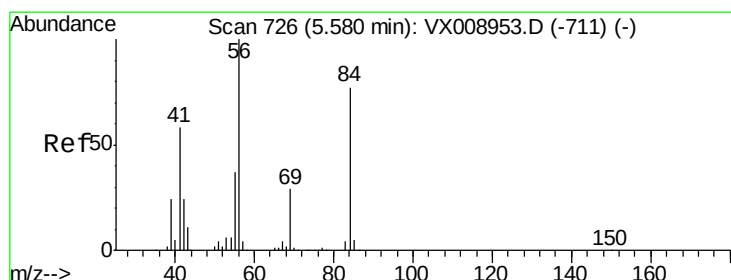
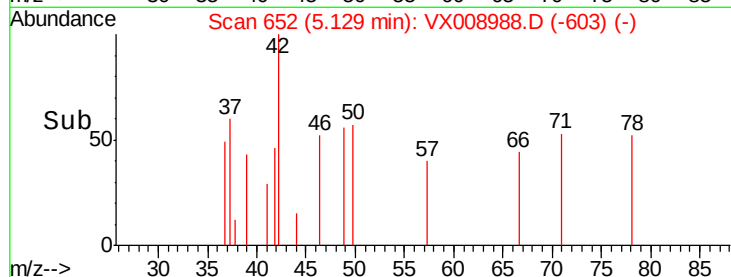
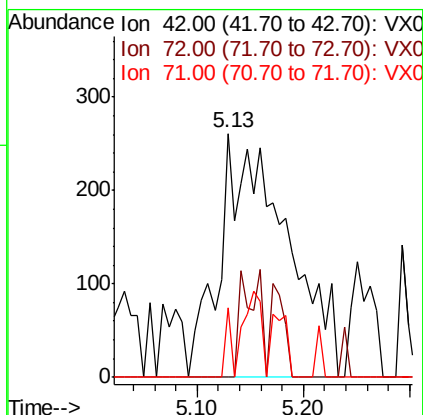
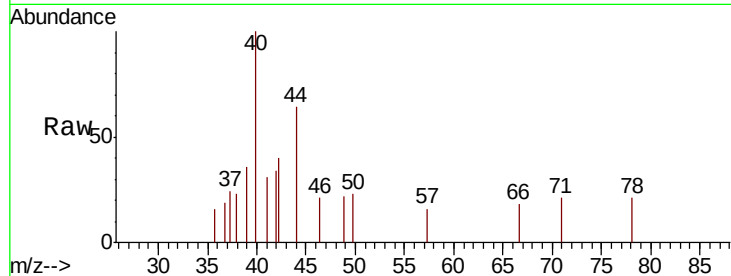




#29  
Tetrahydrofuran  
Concen: 0.562 ug/l  
RT: 5.13 min Scan# 652  
Delta R.T. -0.00 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

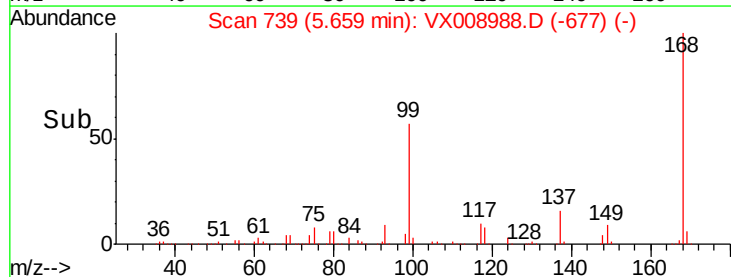
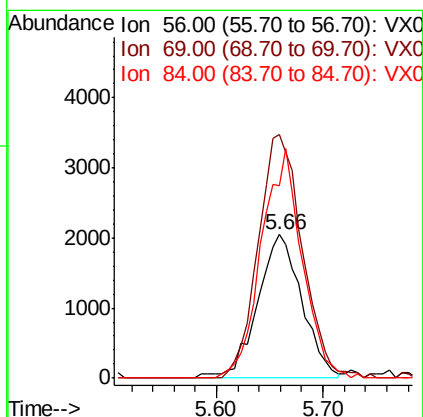
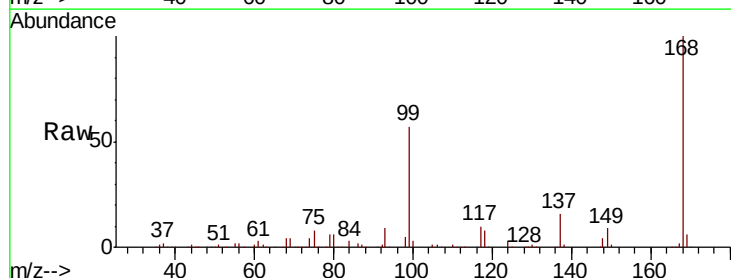
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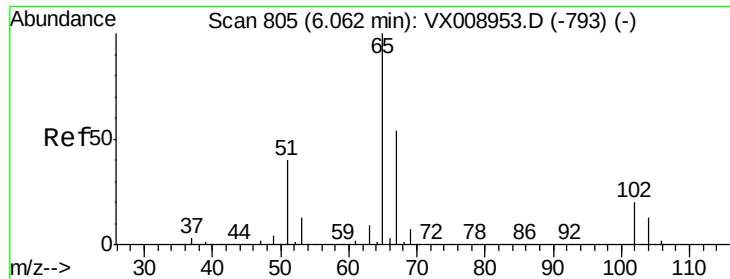
Tot Ion: 42 Resp: 1139  
Ion Ratio Lower Upper  
42 100  
72 0.0 30.6 45.8#  
71 2.4 28.8 43.2#



#31  
Cyclohexane  
Concen: 1.022 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. 0.08 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

Tgt Ion: 56 Resp: 5948  
Ion Ratio Lower Upper  
56 100  
69 169.6 23.3 34.9#  
84 133.9 61.7 92.5#

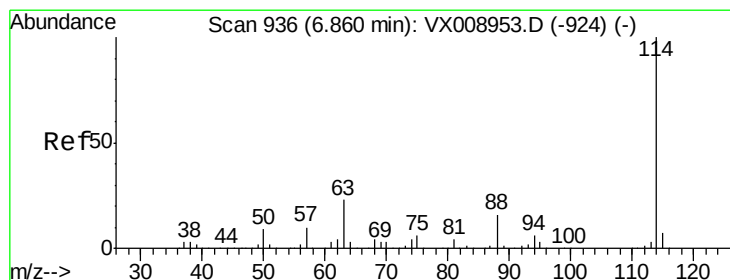
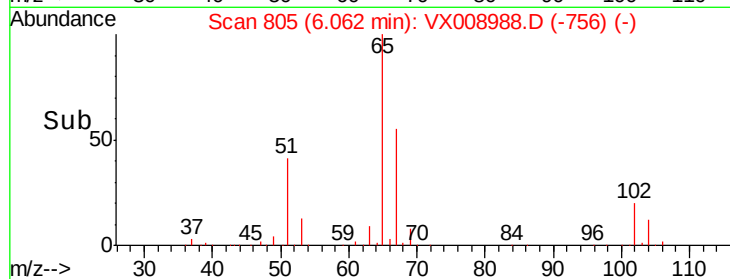
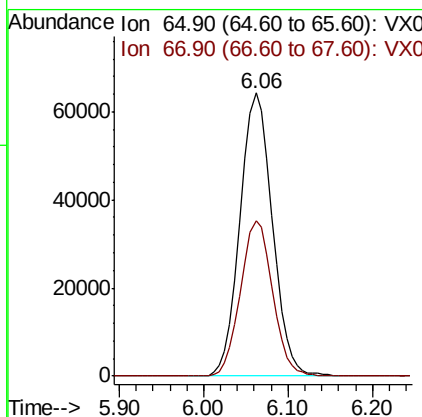
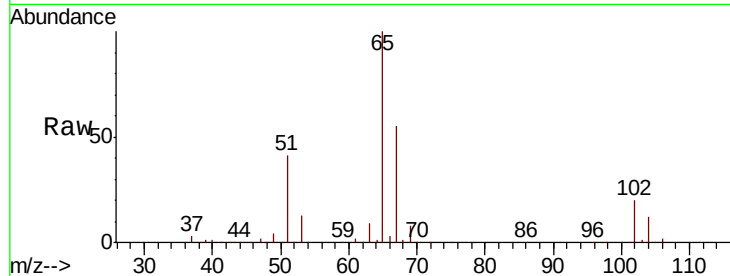




#33  
 1,2-Dichloroethane-d4  
 Concen: 45.765 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. -0.00 min  
 Lab File: VX008988.D  
 Acq: 16 Apr 2019 15:28

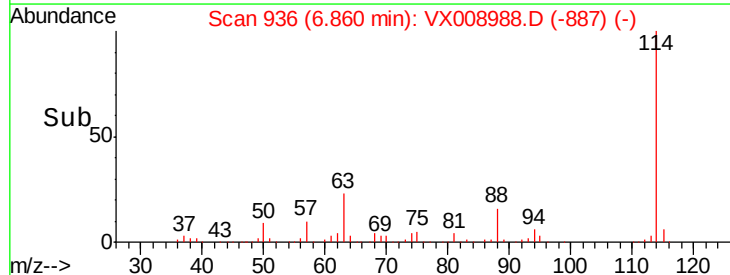
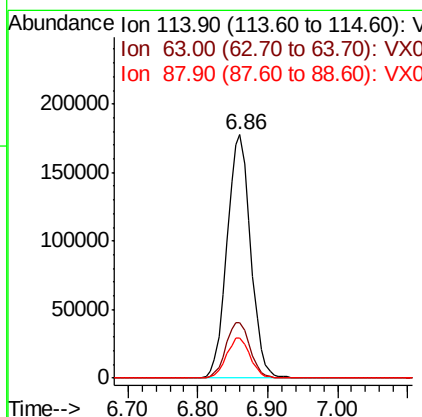
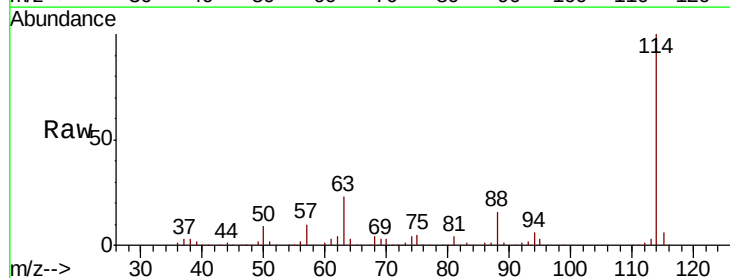
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TB-01-190415

Tot Ion: 65 Resp: 167175  
 Ion Ratio Lower Upper  
 65 100  
 67 54.5 0.0 108.6

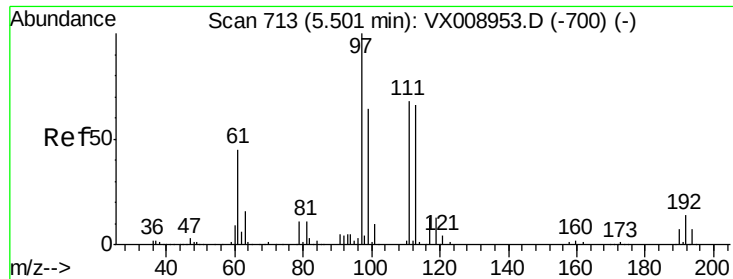


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX008988.D  
 Acq: 16 Apr 2019 15:28

Tgt Ion: 114 Resp: 414728  
 Ion Ratio Lower Upper  
 114 100  
 63 22.9 0.0 46.0  
 88 16.3 0.0 32.6



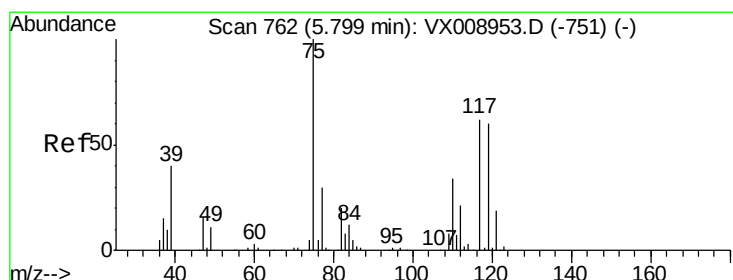
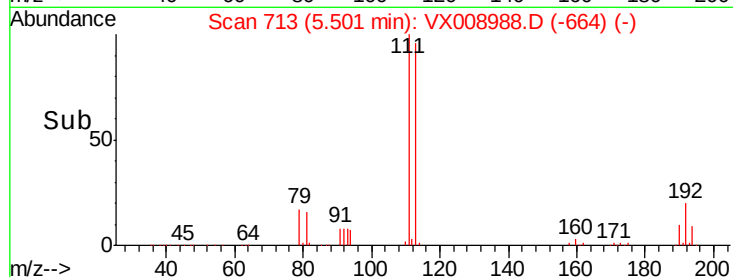
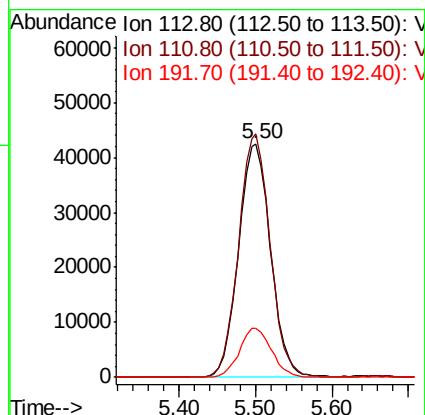
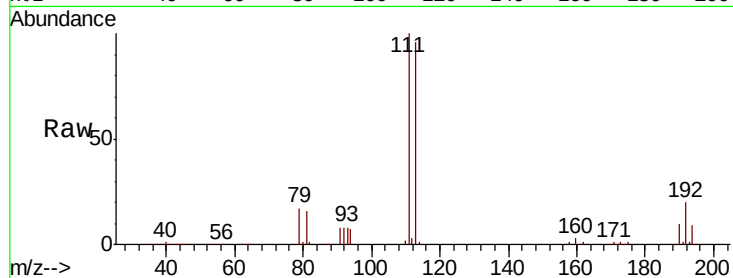




#35  
Dibromofluoromethane  
Concen: 46.361 ug/l  
RT: 5.50 min Scan# 713  
Delta R.T. -0.00 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

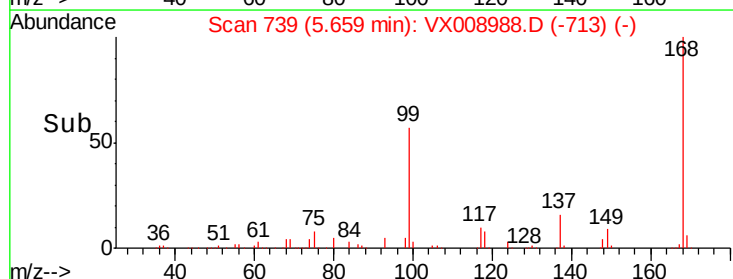
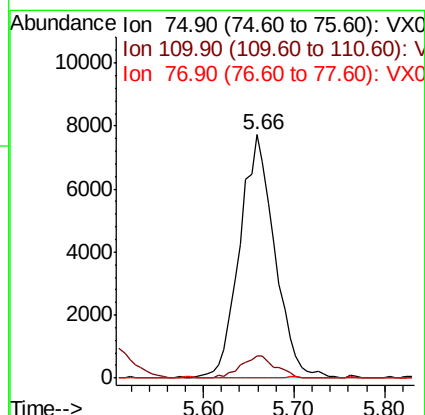
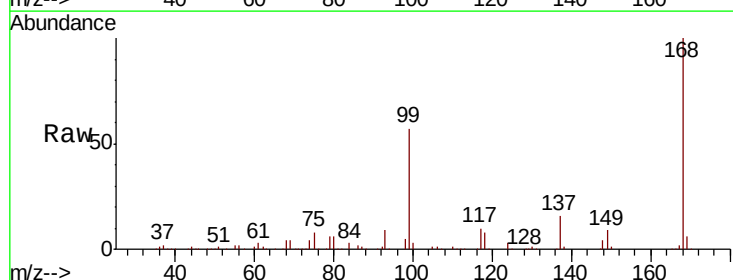
Instrument :  
MSVOA\_X  
ClientSampleId :  
TB-01-190415

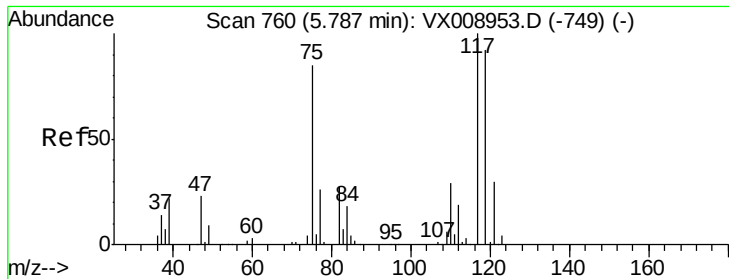
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.8 | 82.9  | 124.3 |
| 192     | 21.1  | 17.4  | 26.0  |



#36  
1,1-Dichloropropene  
Concen: 4.824 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.14 min  
Lab File: VX008988.D  
Acq: 16 Apr 2019 15:28

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 9.0   | 16.9  | 50.7# |
| 77      | 0.0   | 25.0  | 37.4# |





#38

Carbon Tetrachloride

Concen: 7.003 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.13 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

Instrument :

MSVOA\_X

ClientSampleId :

TB-01-190415

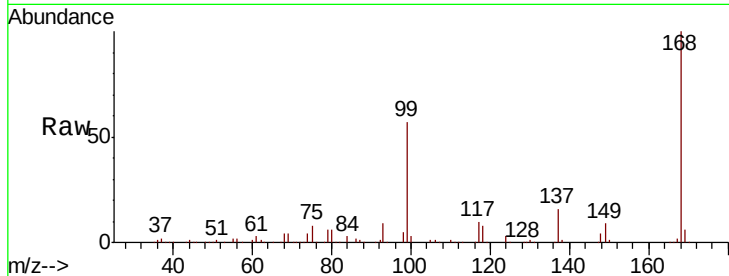
Tot Ion:117 Resp: 25464

Ion Ratio Lower Upper

117 100

119 4.9 73.8 110.8#

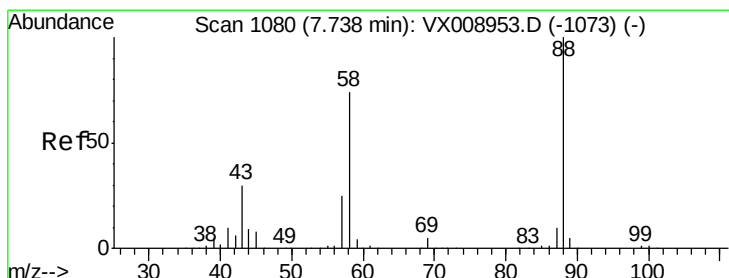
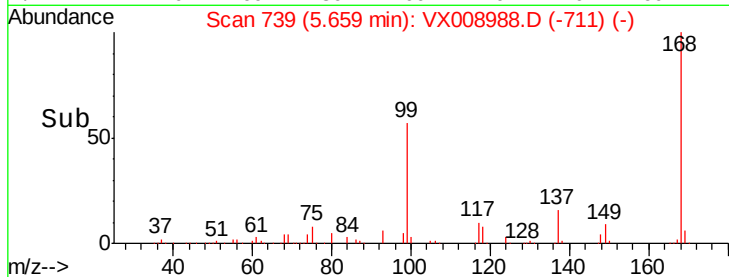
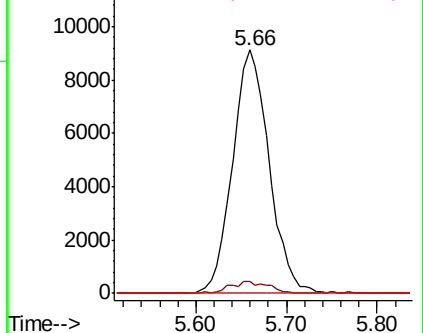
121 0.0 23.6 35.4#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#49

1,4-Dioxane

Concen: 0.328 ug/l

RT: 7.69 min Scan# 1072

Delta R.T. -0.05 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

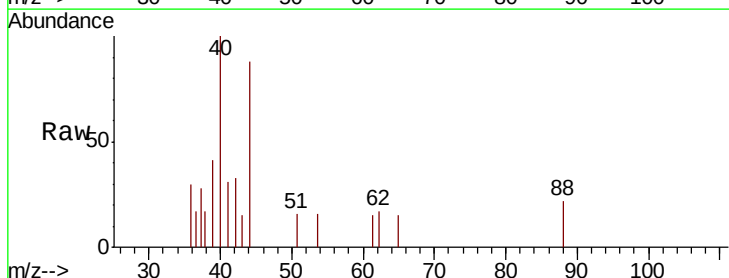
Tgt Ion: 88 Resp: 27

Ion Ratio Lower Upper

88 100

43 151.9 29.3 43.9#

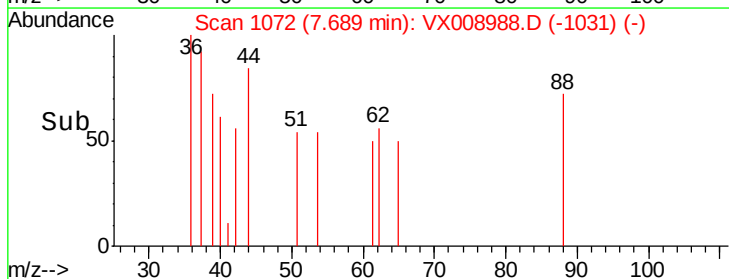
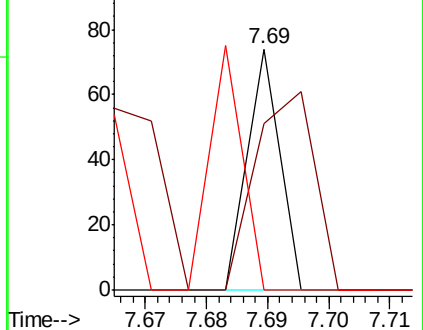
58 100.0 62.6 93.8#

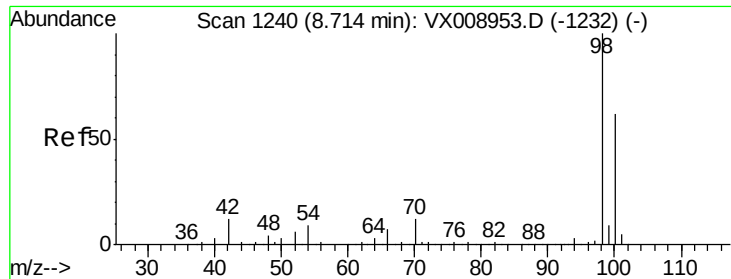


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#50

Toluene-d8

Concen: 48.820 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

Instrument :

MSVOA\_X

ClientSampleId :

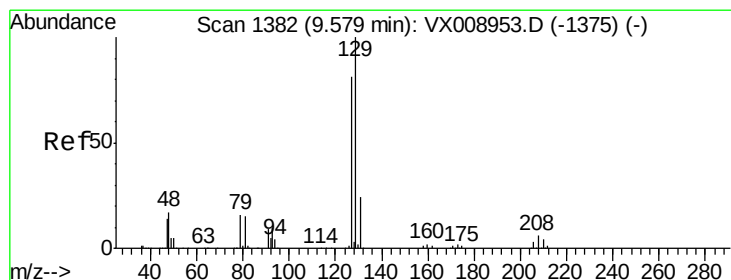
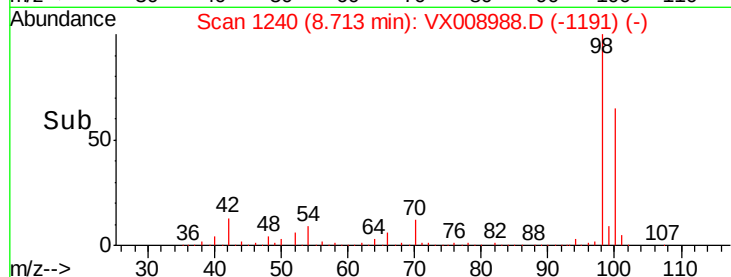
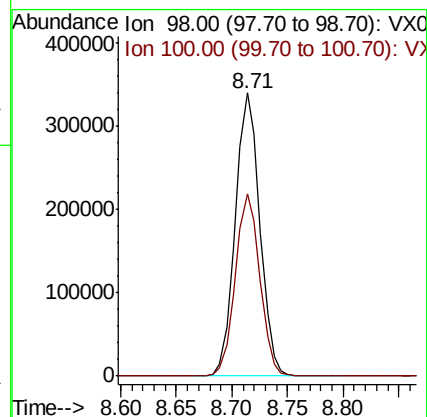
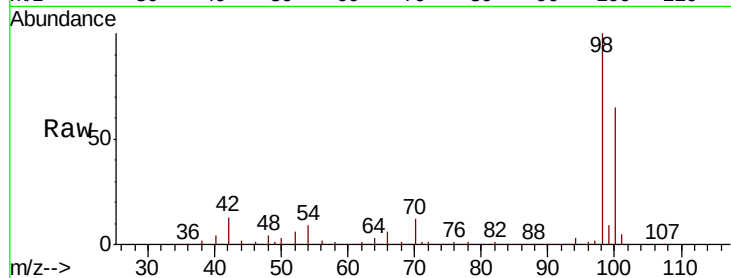
TB-01-190415

Tot Ion: 98 Resp: 518211

Ion Ratio Lower Upper

98 100

100 64.3 51.4 77.2



#60

Dibromochloromethane

Concen: 0.447 ug/l

RT: 9.34 min Scan# 1342

Delta R.T. -0.24 min

Lab File: VX008988.D

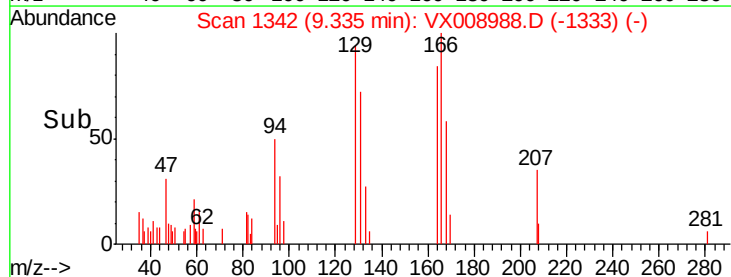
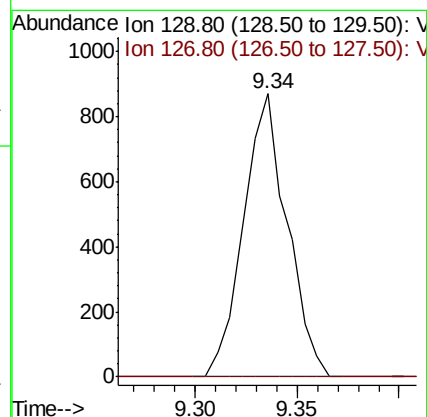
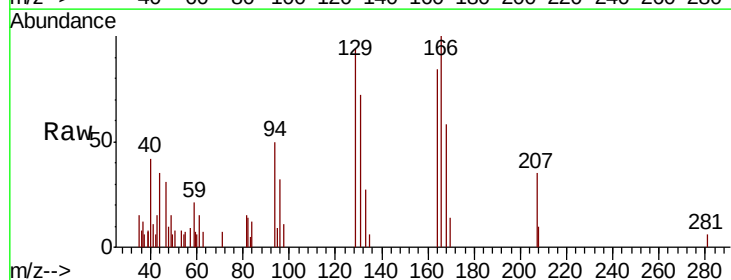
Acq: 16 Apr 2019 15:28

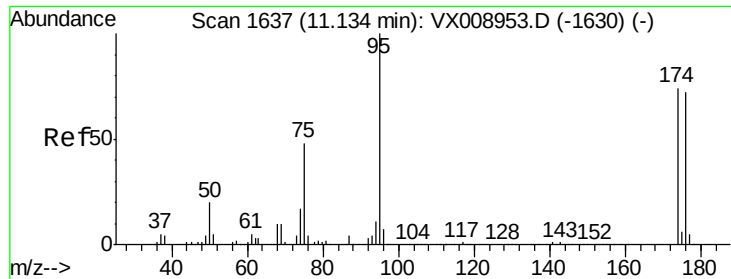
Tgt Ion: 129 Resp: 1288

Ion Ratio Lower Upper

129 100

127 0.0 39.1 117.2#





#62

4-Bromofluorobenzene

Concen: 47.556 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

Instrument :

MSVOA\_X

ClientSampleId :

TB-01-190415

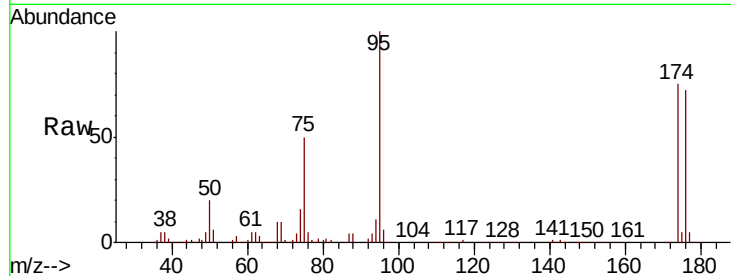
Tot Ion: 95 Resp: 178192

Ion Ratio Lower Upper

95 100

174 78.6 0.0 159.6

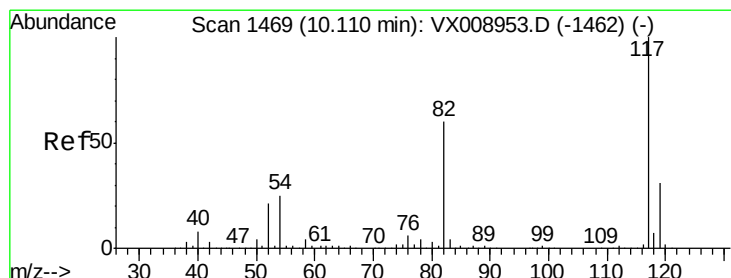
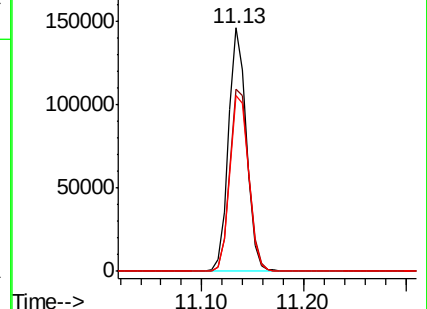
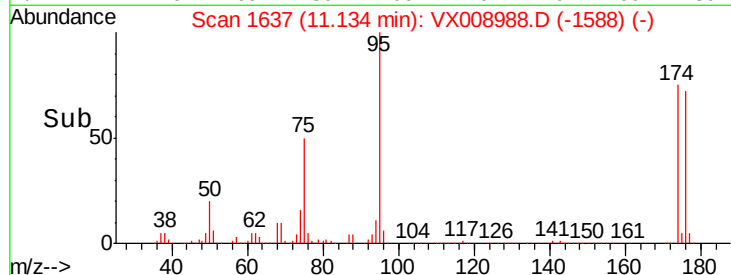
176 76.1 0.0 154.8



Abundance Ion 94.90 (94.60 to 95.60): VX008988.D (-1588) (-)

Ion 173.80 (173.50 to 174.50): VX008988.D (-1588) (-)

Ion 175.80 (175.50 to 176.50): VX008988.D (-1588) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

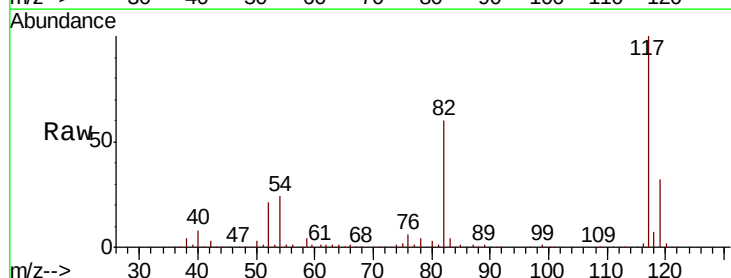
Tgt Ion: 117 Resp: 367981

Ion Ratio Lower Upper

117 100

82 59.7 48.2 72.4

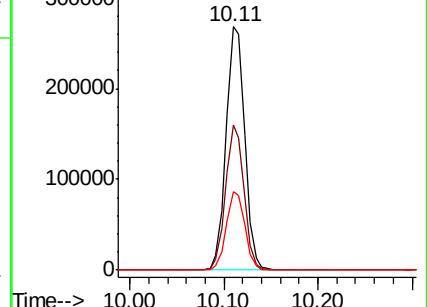
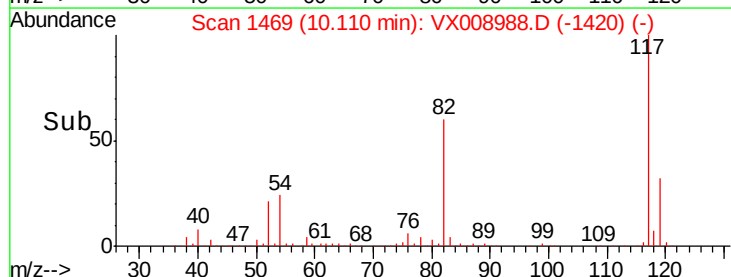
119 32.0 25.0 37.6

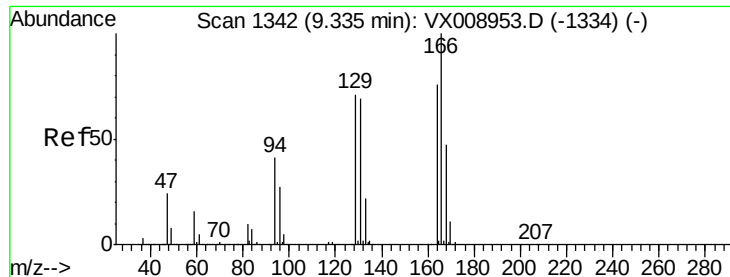


Abundance Ion 116.90 (116.60 to 117.60): VX008988.D (-1420) (-)

Ion 82.00 (81.70 to 82.70): VX008988.D (-1420) (-)

Ion 118.90 (118.60 to 119.60): VX008988.D (-1420) (-)





#64

Tetrachloroethene

Concen: 0.427 ug/l

RT: 9.34 min Scan# 1342

Delta R.T. -0.00 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

Instrument :

MSVOA\_X

ClientSampled :

TB-01-190415

Tot Ion:164 Resp: 1193

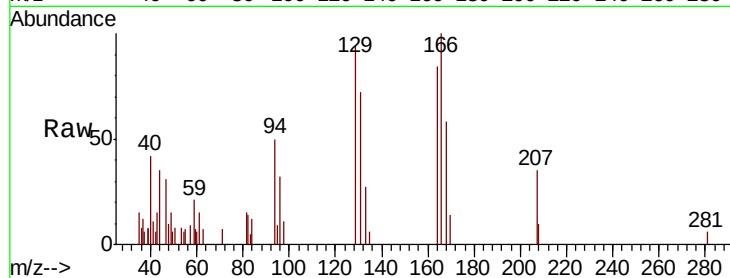
Ion Ratio Lower Upper

164 100

166 119.1 105.0 157.4

129 111.4 74.2 111.4#

131 85.7 72.2 108.2

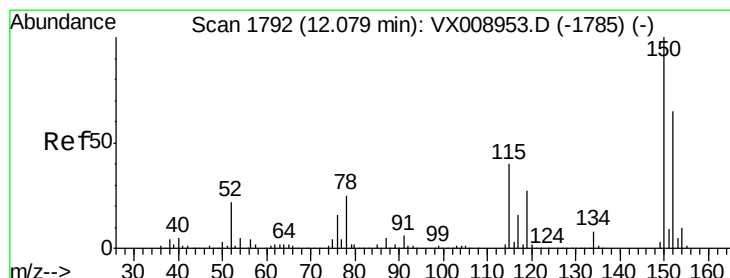
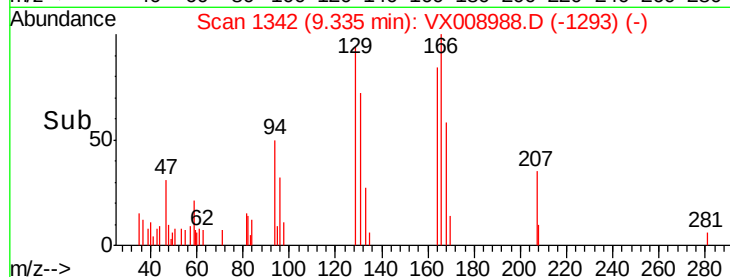
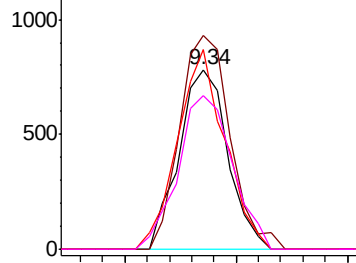


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

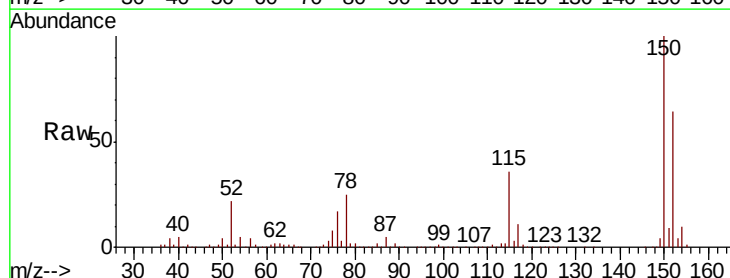
Tgt Ion:152 Resp: 158239

Ion Ratio Lower Upper

152 100

115 59.1 41.4 124.2

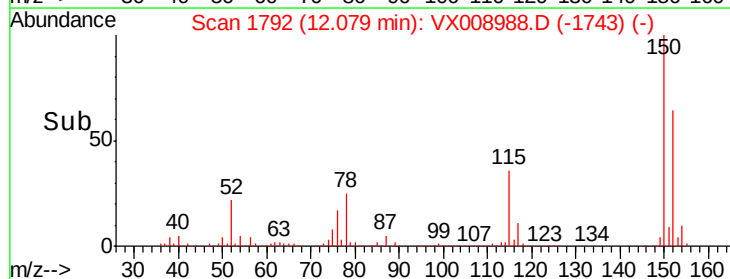
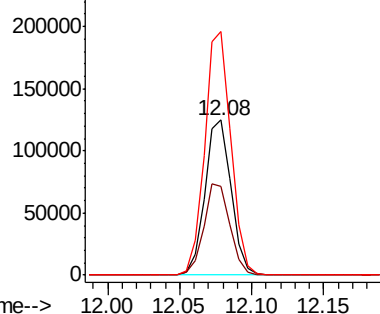
150 157.9 0.0 349.8

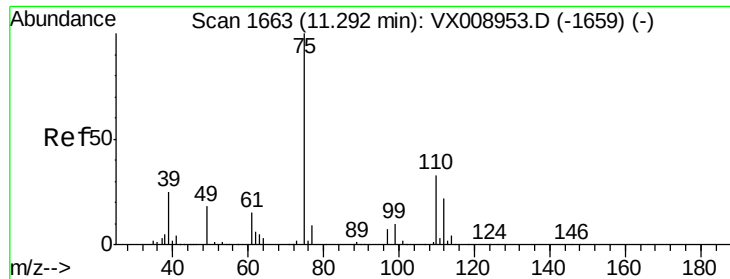


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 23.345 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

Instrument :

MSVOA\_X

ClientSampleId :

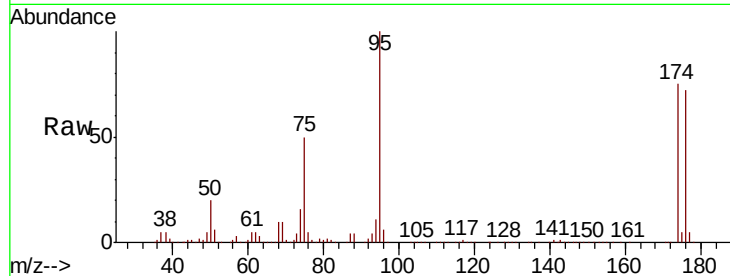
TB-01-190415

Tot Ion: 75 Resp: 90204

Ion Ratio Lower Upper

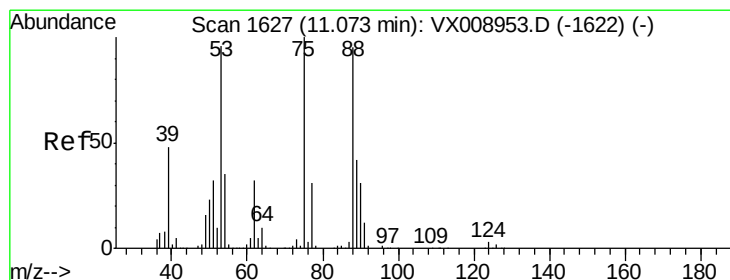
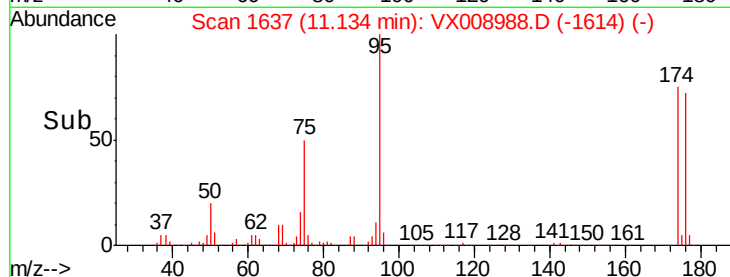
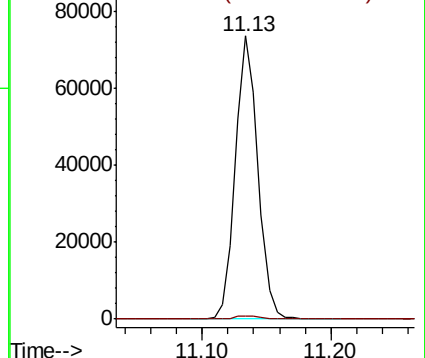
75 100

77 1.3 22.7 68.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0



#81

trans-1,4-Dichloro-2-butene

Concen: 59.934 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008988.D

Acq: 16 Apr 2019 15:28

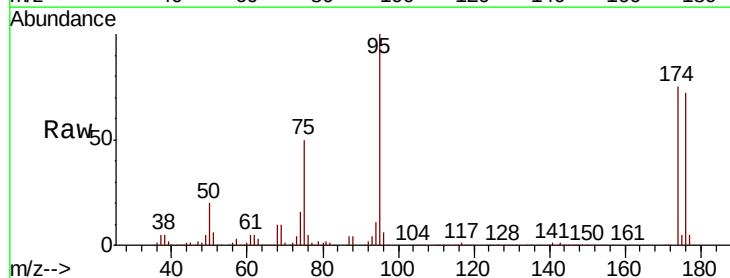
Tgt Ion: 75 Resp: 90204

Ion Ratio Lower Upper

75 100

53 0.2 78.2 117.4#

89 0.0 36.0 54.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

