

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX012219\  
 Data File : VX007179.D  
 Acq On : 22 Jan 2019 14:09  
 Operator : JC/SP  
 Sample : K1214-02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-TW527-3337

Quant Time: Jan 23 00:04:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X010819W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 08 14:06:59 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 540948   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 839243   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 782054   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 391070   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 290491   | 51.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.76% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 263623   | 49.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.10%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 993761   | 50.52 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.04% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 358935   | 52.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.68% |      |

## Target Compounds

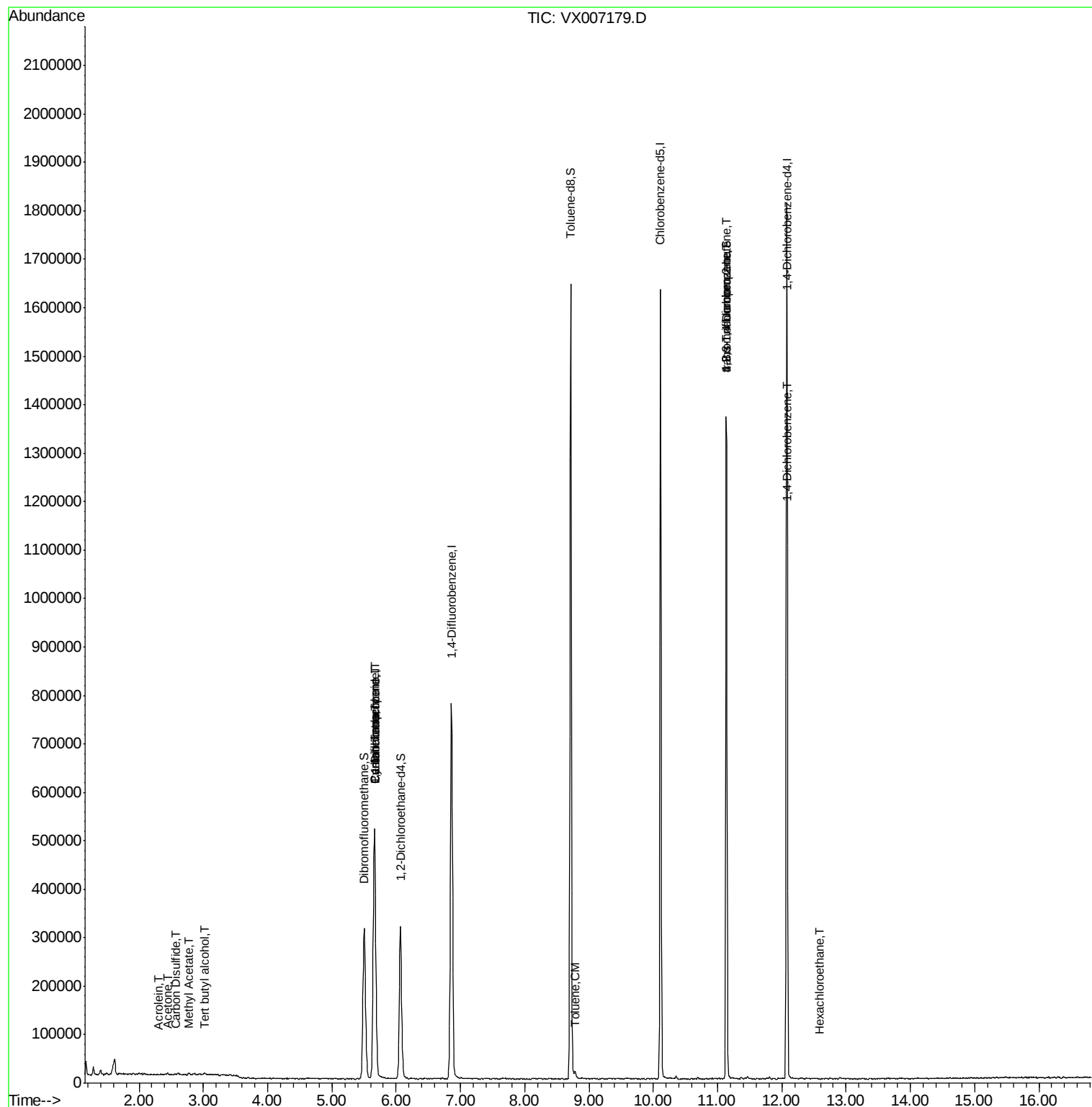
|                                |       |     |        |           | Qvalue |    |
|--------------------------------|-------|-----|--------|-----------|--------|----|
| 11) Tert butyl alcohol         | 3.03  | 59  | 1608   | 1.206     | ug/l   | 95 |
| 13) Acrolein                   | 2.29  | 56  | 145    | 3.333     | ug/l   | 96 |
| 16) Acetone                    | 2.45  | 43  | 5148   | 1.842     | ug/l   | 99 |
| 17) Carbon Disulfide           | 2.57  | 76  | 2868   | 0.224     | ug/l # | 79 |
| 18) Methyl Acetate             | 2.78  | 43  | 3511   | 0.434     | ug/l   | 95 |
| 20) Methylene Chloride         | 2.85  | 84  | 1282   | Below Cal | #      | 58 |
| 31) Cyclohexane                | 5.67  | 56  | 9554   | 1.198     | ug/l # | 11 |
| 36) 1,1-Dichloropropene        | 5.66  | 75  | 34726  | 4.759     | ug/l # | 49 |
| 38) Carbon Tetrachloride       | 5.67  | 117 | 49405  | 6.730     | ug/l # | 15 |
| 49) 1,4-Dioxane                | 7.76  | 88  | 46     | Below Cal | #      | 1  |
| 52) Toluene                    | 8.78  | 92  | 4784   | 0.334     | ug/l   | 94 |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 171752 | 21.673    | ug/l # | 40 |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 171752 | 64.239    | ug/l # | 10 |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146 | 1035   | 0.224     | ug/l # | 1  |
| 90) Hexachloroethane           | 12.58 | 117 | 55     | 2.921     | ug/l # | 6  |

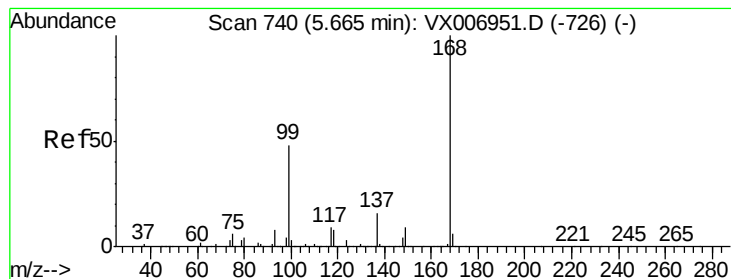
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX012219\  
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SA-TW527-3337

Quant Time: Jan 23 00:04:15 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X010819W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jan 08 14:06:59 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

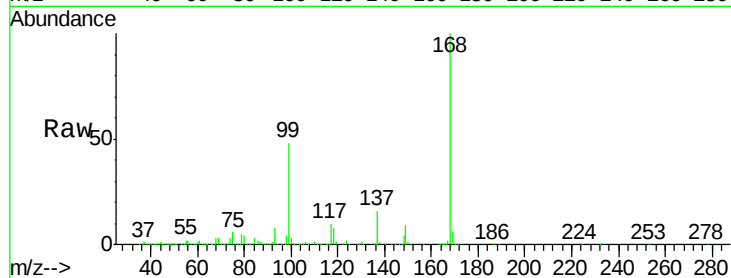
SA-TW527-3337

Tot Ion:168 Resp: 540948

Ion Ratio Lower Upper

168 100

99 47.4 41.8 62.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

200000

150000

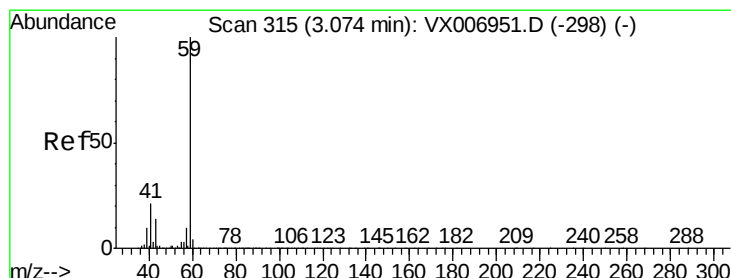
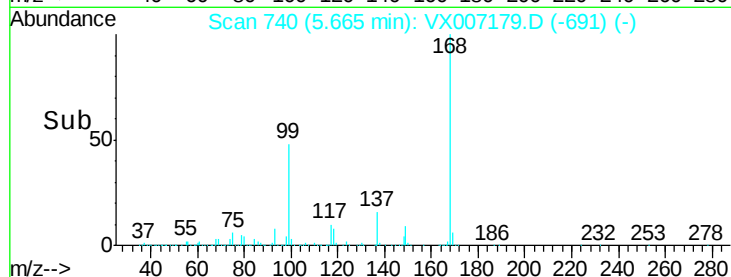
100000

50000

0

5.50 5.60 5.70 5.80

Time-->



#11

Tert butyl alcohol

Concen: 1.206 ug/l

RT: 3.03 min Scan# 307

Delta R.T. -0.05 min

Lab File: VX007179.D

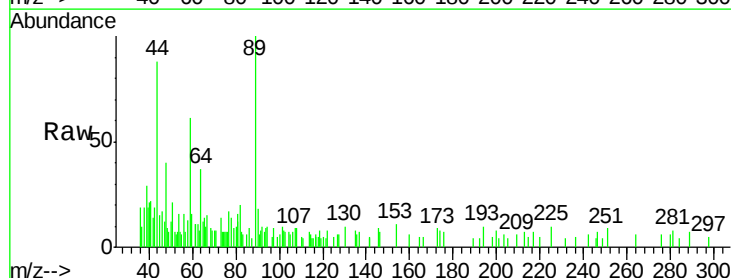
Acq: 22 Jan 2019 14:09

Tgt Ion: 59 Resp: 1608

Ion Ratio Lower Upper

59 100

57 8.7 8.5 12.7



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

1200

1000

800

600

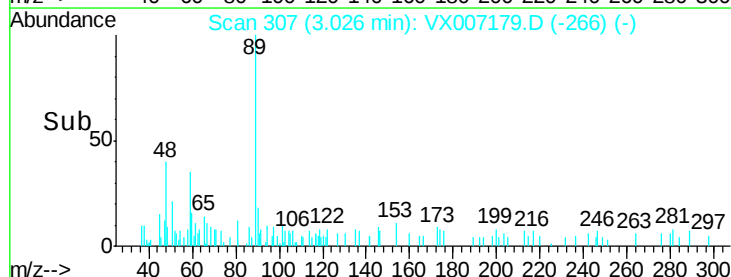
400

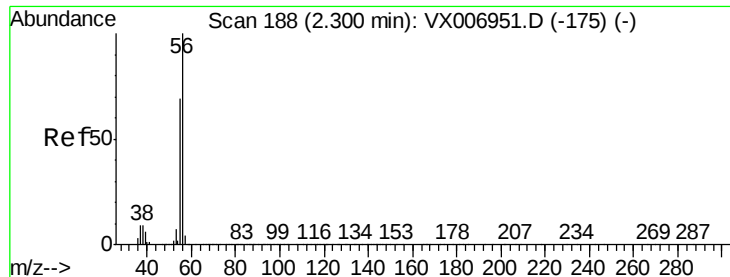
200

0

3.00 3.05

Time-->





#13

Acrolein

Concen: 3.333 ug/l

RT: 2.29 min Scan# 186

Delta R.T. -0.01 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

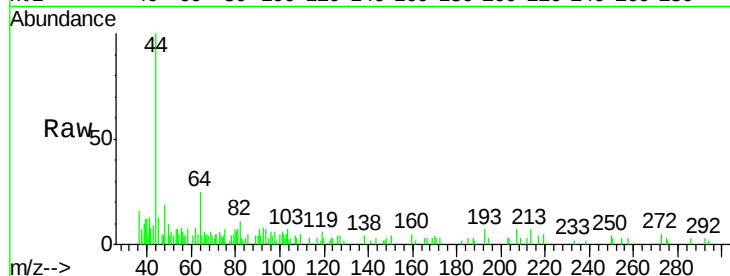
SA-TW527-3337

Tot Ion: 56 Resp: 145

Ion Ratio Lower Upper

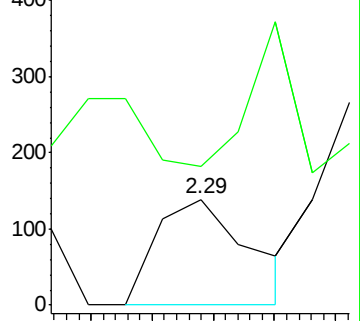
56 100

55 69.7 58.2 87.4

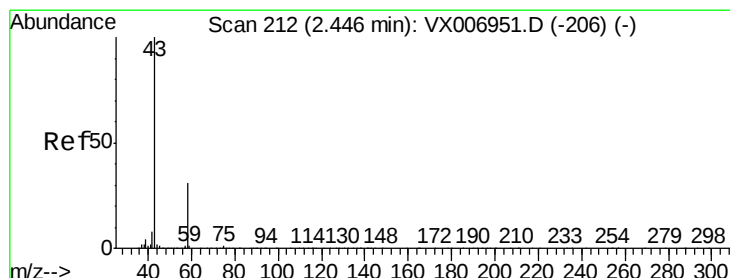
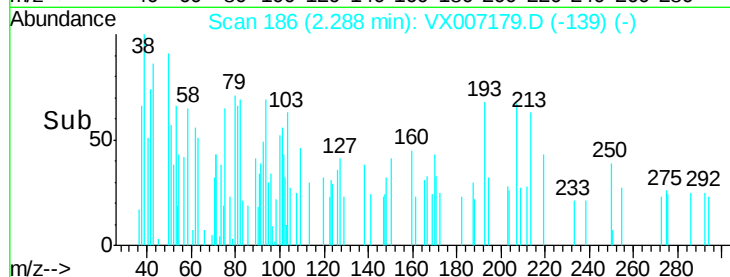


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



Time-->



#16

Acetone

Concen: 1.842 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX007179.D

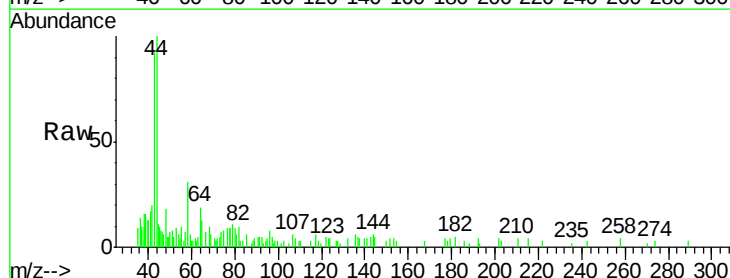
Acq: 22 Jan 2019 14:09

Tgt Ion: 43 Resp: 5148

Ion Ratio Lower Upper

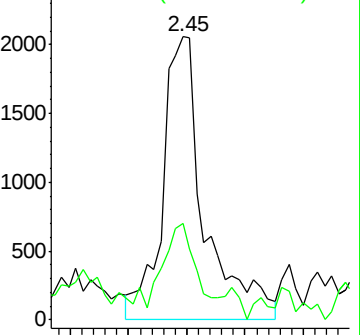
43 100

58 31.7 25.0 37.6

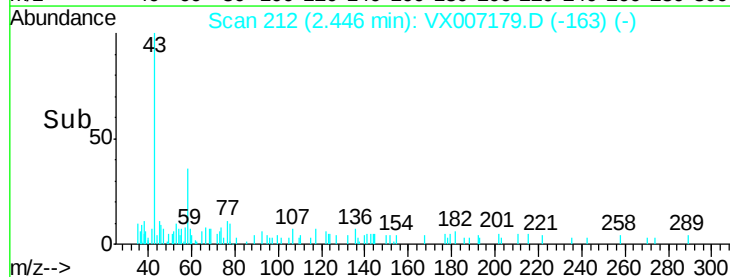


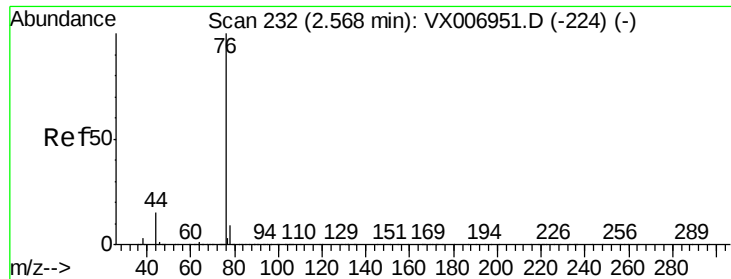
Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



Time-->

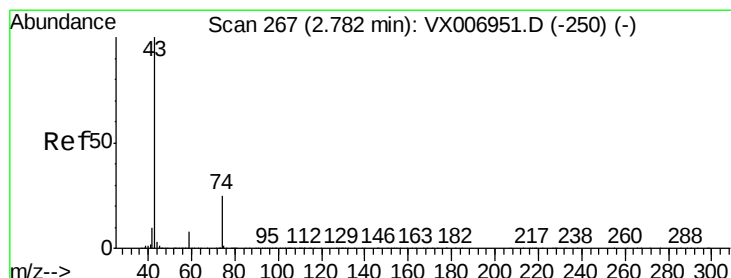
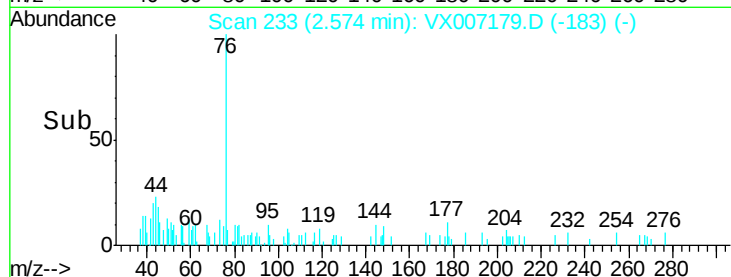
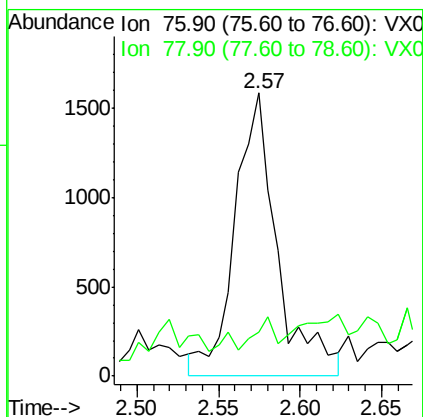
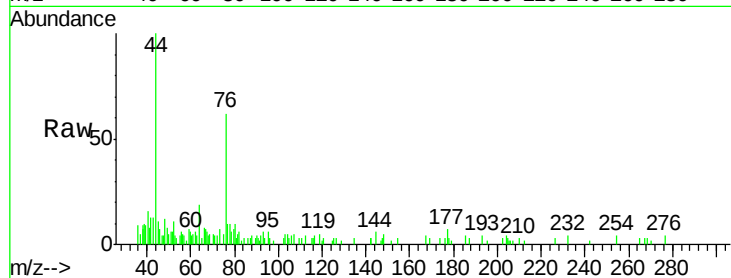




#17  
Carbon Disulfide  
Concen: 0.224 ug/l  
RT: 2.57 min Scan# 233  
Delta R.T. 0.01 min  
Lab File: VX007179.D  
Acq: 22 Jan 2019 14:09

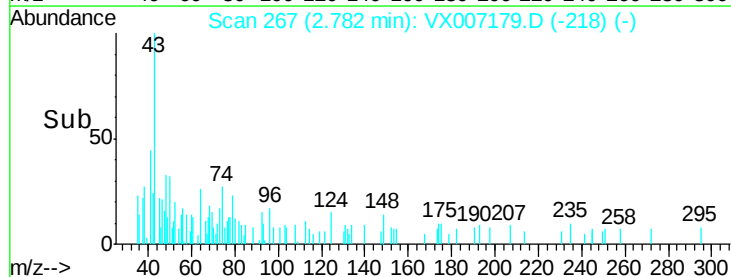
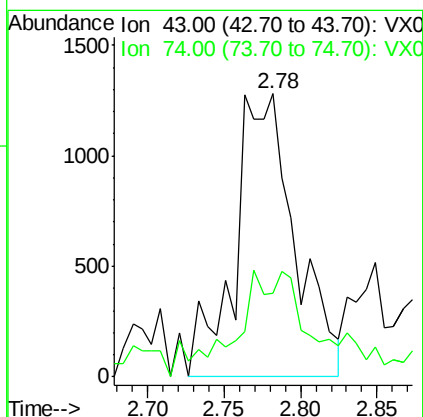
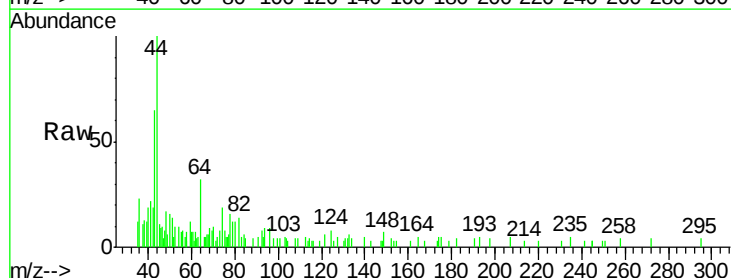
Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-TW527-3337

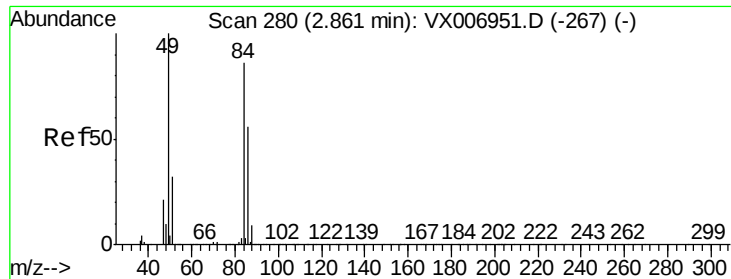
Tot Ion: 76 Resp: 2868  
Ion Ratio Lower Upper  
76 100  
78 1.4 7.0 10.6#



#18  
Methyl Acetate  
Concen: 0.434 ug/l  
RT: 2.78 min Scan# 267  
Delta R.T. 0.00 min  
Lab File: VX007179.D  
Acq: 22 Jan 2019 14:09

Tgt Ion: 43 Resp: 3511  
Ion Ratio Lower Upper  
43 100  
74 25.8 18.6 28.0

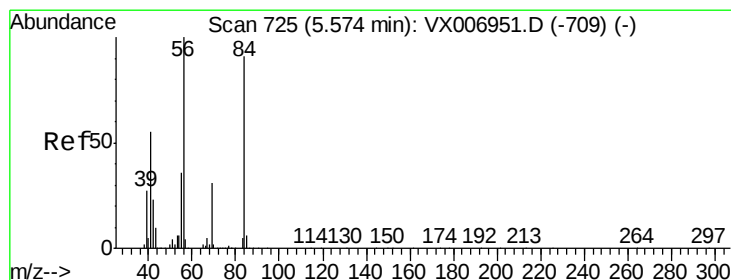
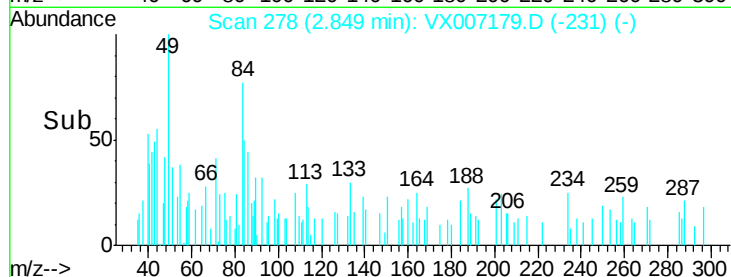
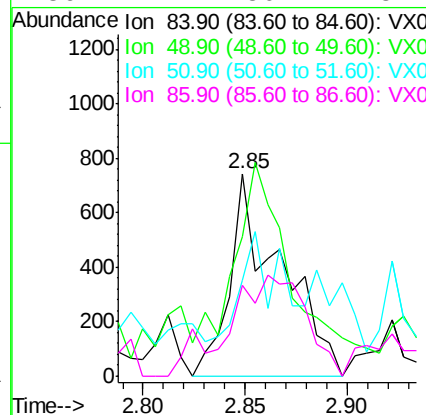
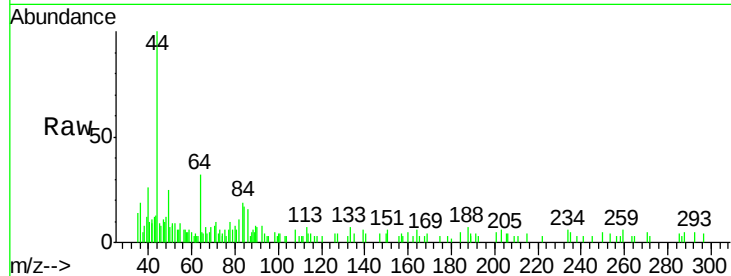




#20  
Methvlene Chloride  
Concen: Below Cal  
RT: 2.85 min Scan# 278  
Delta R.T. -0.01 min  
Lab File: VX007179.D  
Acq: 22 Jan 2019 14:09

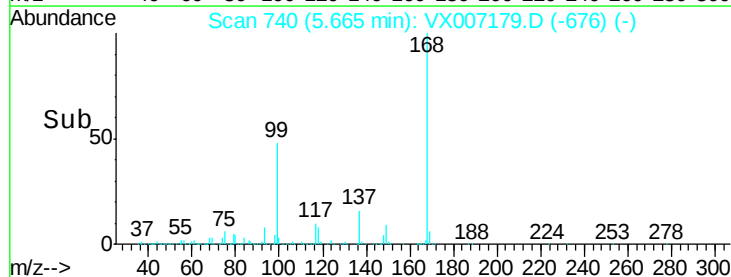
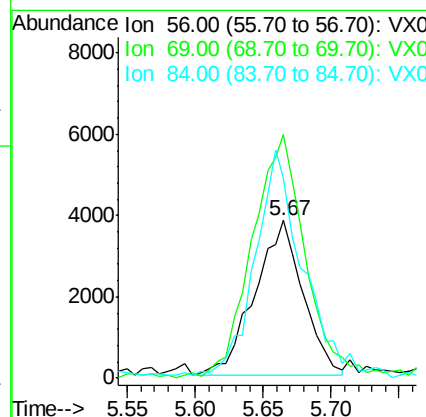
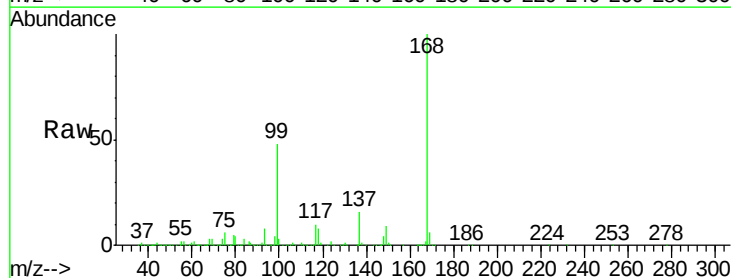
Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-TW527-3337

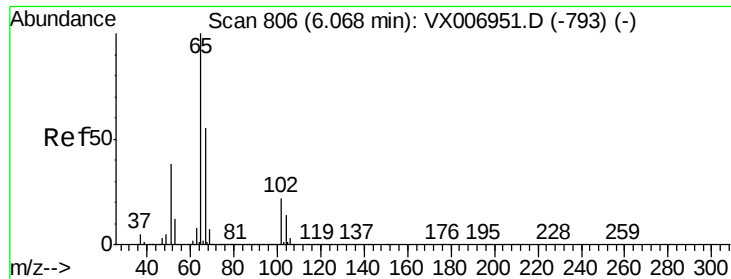
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 84    | Resp: | 1282   |
| Ion      | Ratio | Lower | Upper  |
| 84       | 100   |       |        |
| 49       | 52.2  | 91.8  | 137.6# |
| 51       | 21.8  | 28.5  | 42.7#  |
| 86       | 44.7  | 50.2  | 75.2#  |



#31  
Cyclohexane  
Concen: 1.198 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. 0.09 min  
Lab File: VX007179.D  
Acq: 22 Jan 2019 14:09

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 56    | Resp: | 9554   |
| Ion      | Ratio | Lower | Upper  |
| 56       | 100   |       |        |
| 69       | 153.0 | 24.4  | 36.6#  |
| 84       | 126.5 | 70.0  | 105.0# |





#33

1,2-Dichloroethane-d4

Concen: 51.384 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.00 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

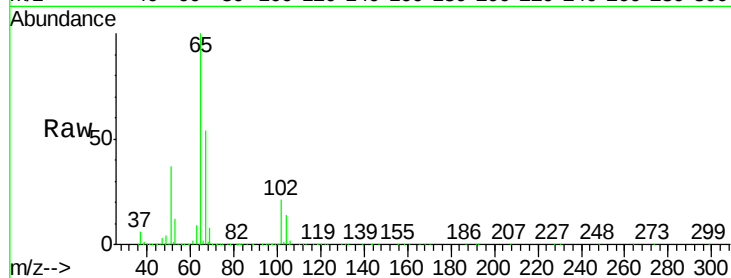
SA-TW527-3337

Tot Ion: 65 Resp: 290491

Ion Ratio Lower Upper

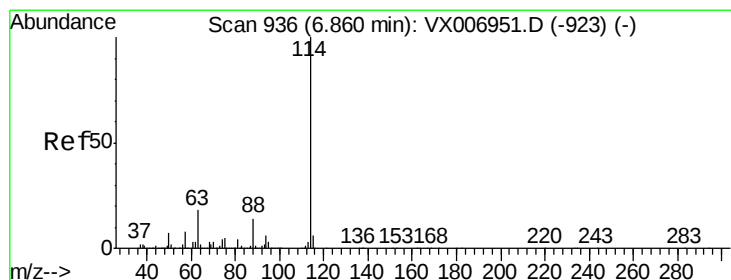
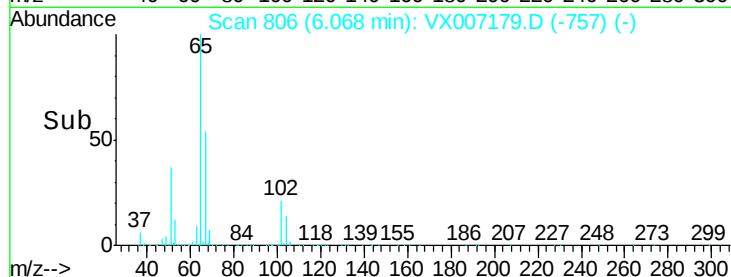
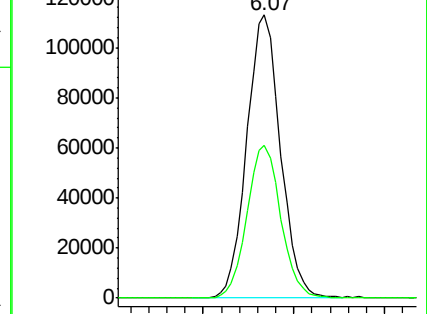
65 100

67 54.4 0.0 105.0



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. 0.00 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

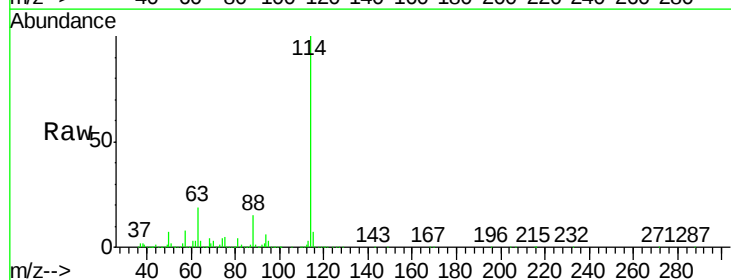
Tgt Ion: 114 Resp: 839243

Ion Ratio Lower Upper

114 100

63 18.8 0.0 34.8

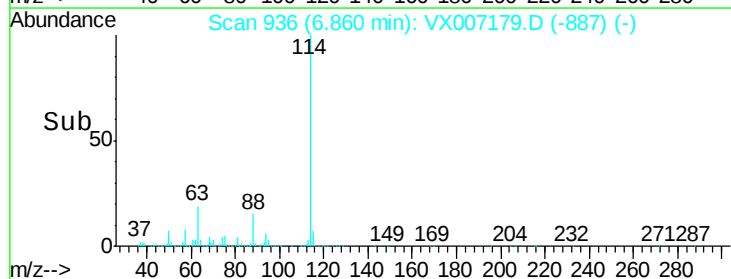
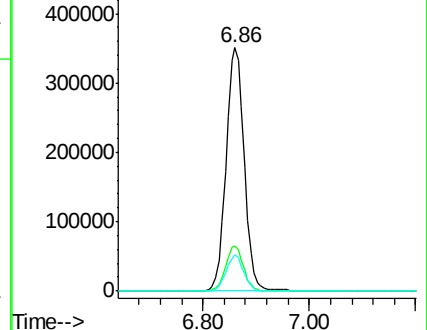
88 14.7 0.0 28.8

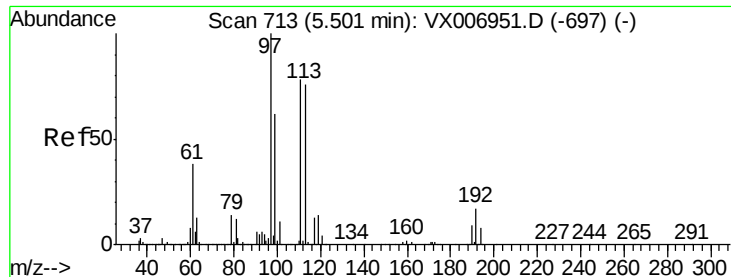


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 49.051 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

SA-TW527-3337

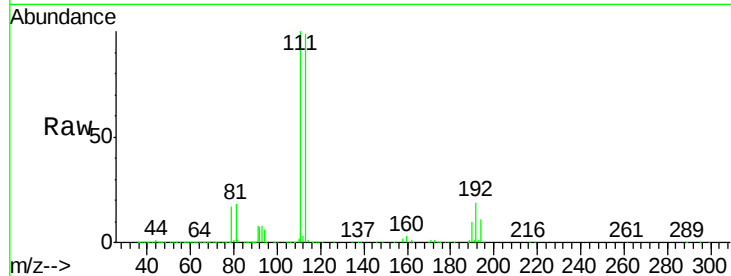
Tot Ion:113 Resp: 263623

Ion Ratio Lower Upper

113 100

111 101.9 81.6 122.4

192 21.4 16.7 25.1

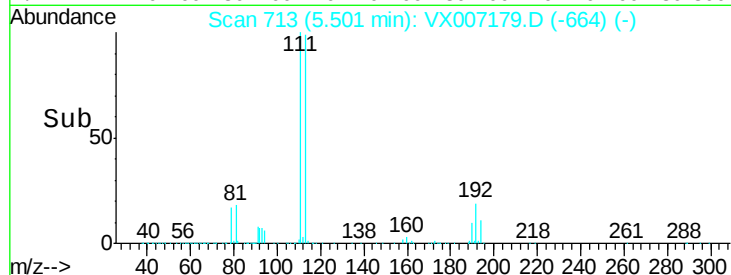


Abundance Ion 112.80 (112.50 to 113.50): V

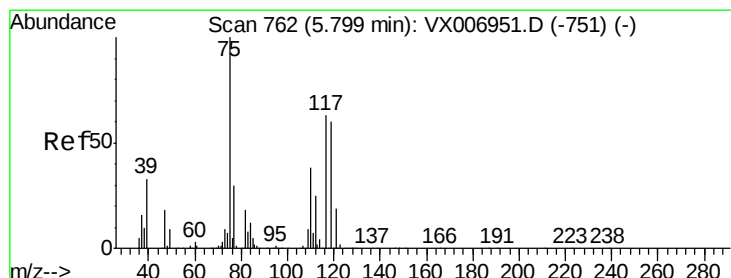
Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

5.50



Time-->



#36

1,1-Dichloropropene

Concen: 4.759 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

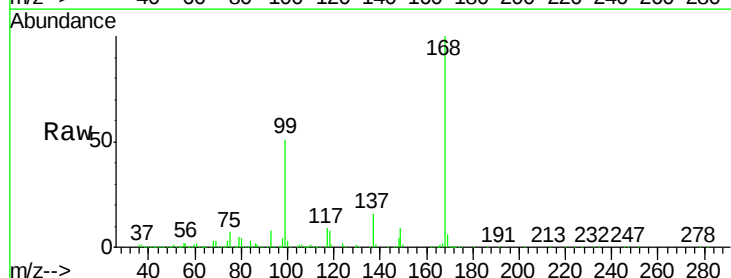
Tgt Ion: 75 Resp: 34726

Ion Ratio Lower Upper

75 100

110 10.6 20.2 60.5#

77 0.9 24.8 37.2#

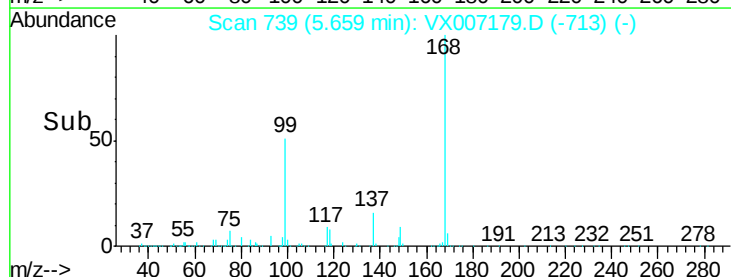


Abundance Ion 74.90 (74.60 to 75.60): VX0

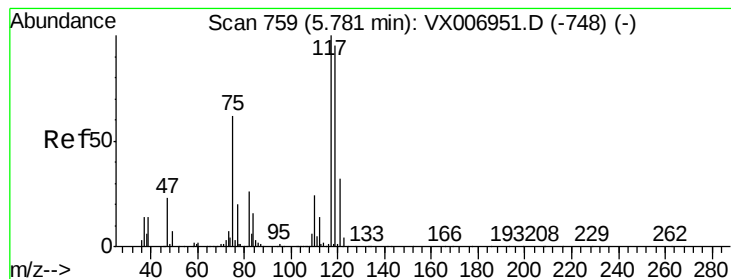
Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

5.66



Time-->



#38

Carbon Tetrachloride

Concen: 6.730 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

SA-TW527-3337

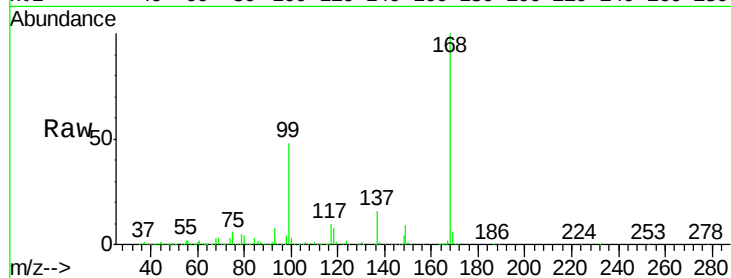
Tot Ion:117 Resp: 49405

Ion Ratio Lower Upper

117 100

119 5.5 79.4 119.2#

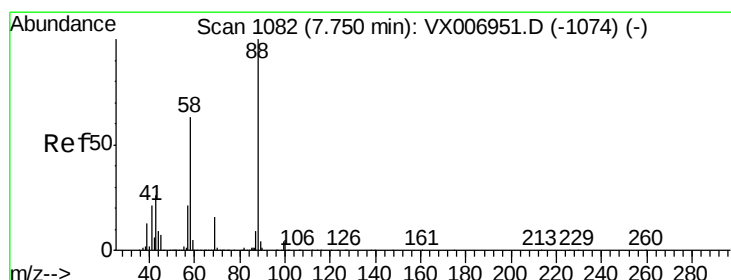
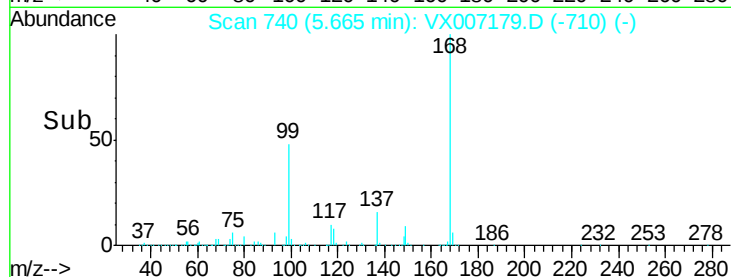
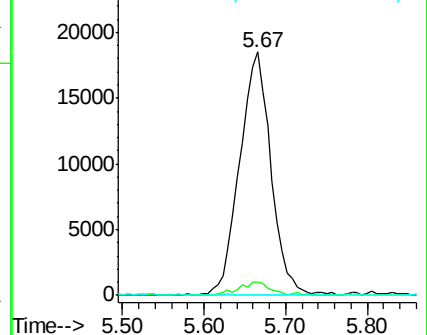
121 0.0 24.0 36.0#



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: Below Cal

RT: 7.76 min Scan# 1083

Delta R.T. 0.01 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

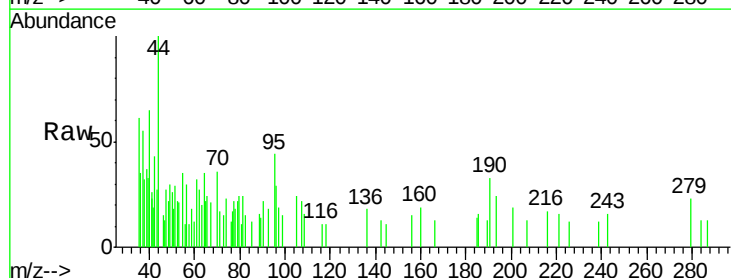
Tgt Ion: 88 Resp: 46

Ion Ratio Lower Upper

88 100

43 478.3 22.2 33.4#

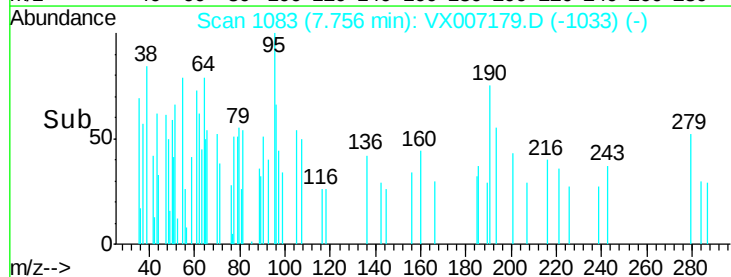
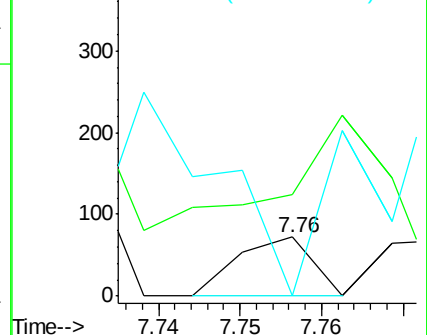
58 0.0 51.0 76.4#

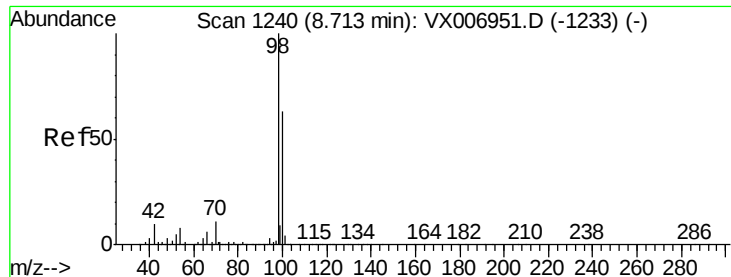


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#50

Toluene-d8

Concen: 50.516 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

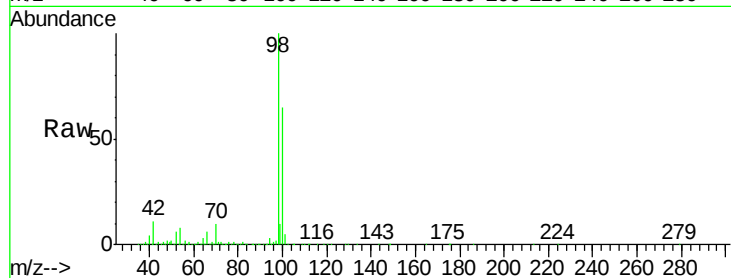
SA-TW527-3337

Tot Ion: 98 Resp: 993761

Ion Ratio Lower Upper

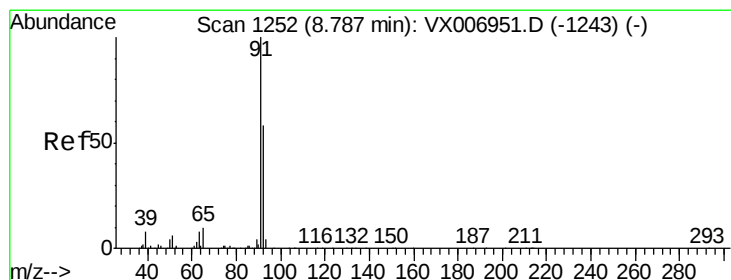
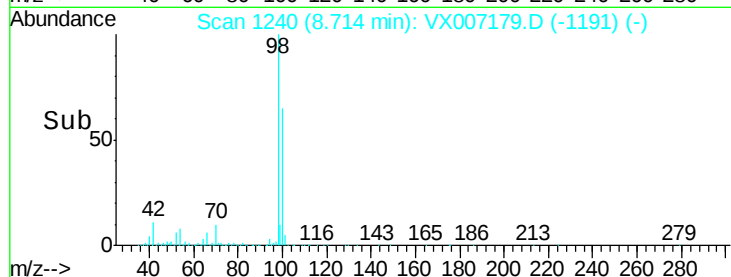
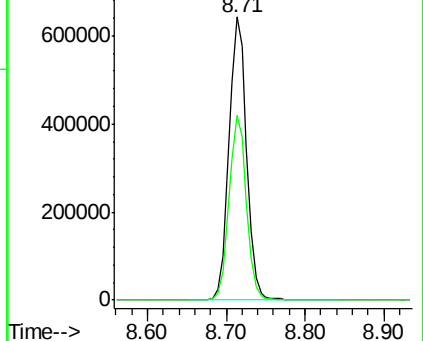
98 100

100 64.2 52.0 78.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0



#52

Toluene

Concen: 0.334 ug/l

RT: 8.78 min Scan# 1251

Delta R.T. -0.01 min

Lab File: VX007179.D

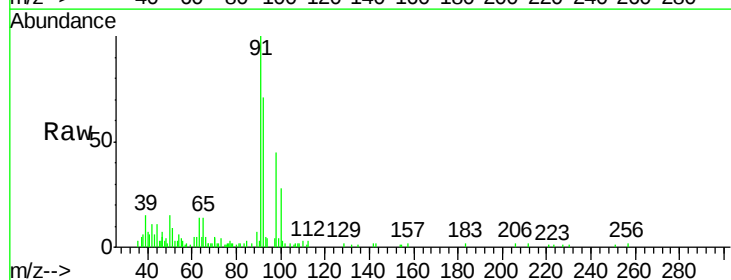
Acq: 22 Jan 2019 14:09

Tgt Ion: 92 Resp: 4784

Ion Ratio Lower Upper

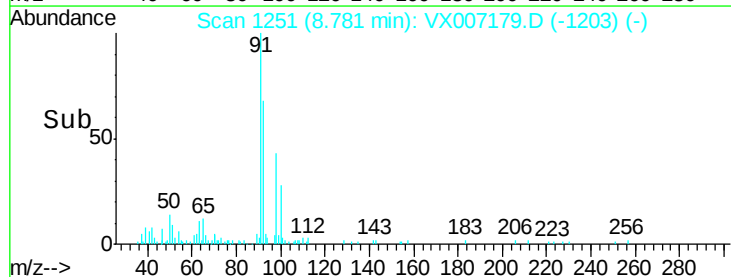
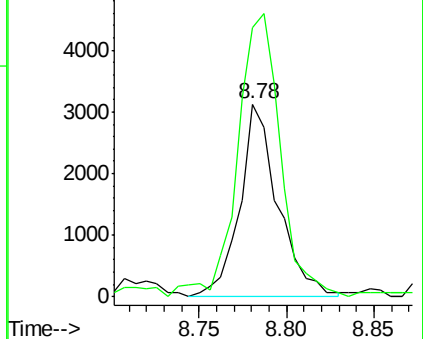
92 100

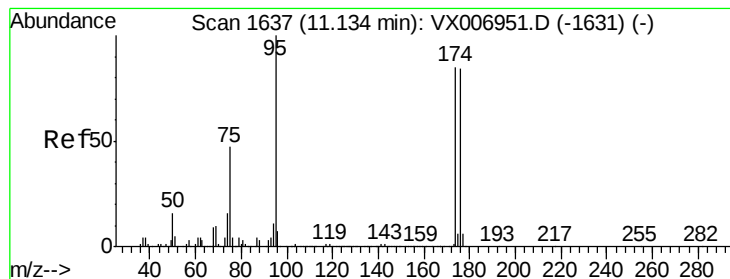
91 164.4 137.6 206.4



Abundance Ion 92.00 (91.70 to 92.70): VX0

Ion 91.00 (90.70 to 91.70): VX0





#62

4-Bromofluorobenzene

Concen: 52.337 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

SA-TW527-3337

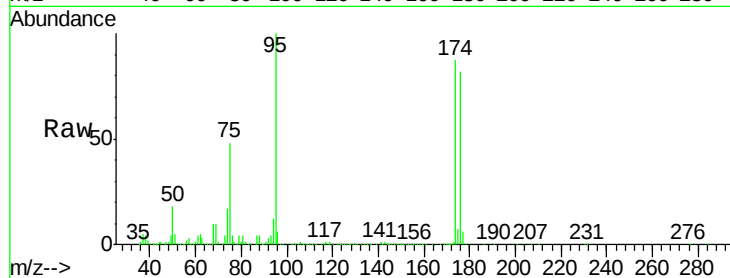
Tot Ion: 95 Resp: 358935

Ion Ratio Lower Upper

95 100

174 92.1 0.0 182.2

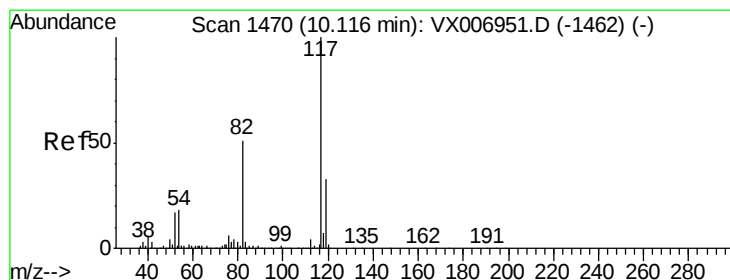
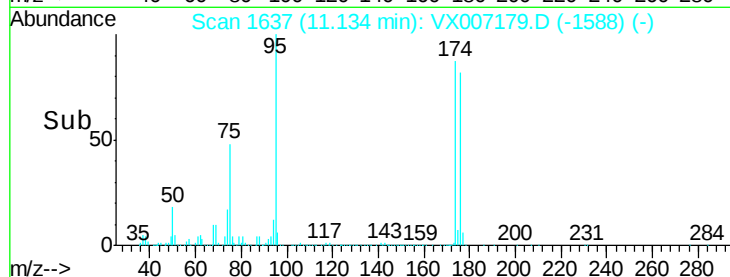
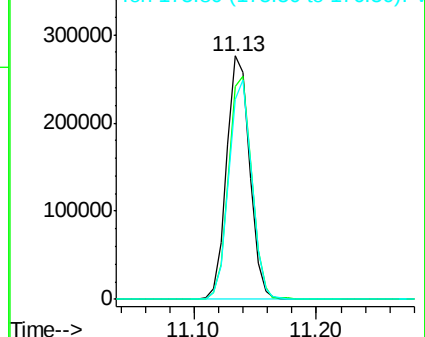
176 89.4 0.0 178.8



Abundance Ion 94.90 (94.60 to 95.60): VX006951.D (-1631) (-)

Ion 173.80 (173.50 to 174.50): VX006951.D (-1631) (-)

Ion 175.80 (175.50 to 176.50): VX006951.D (-1631) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.01 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

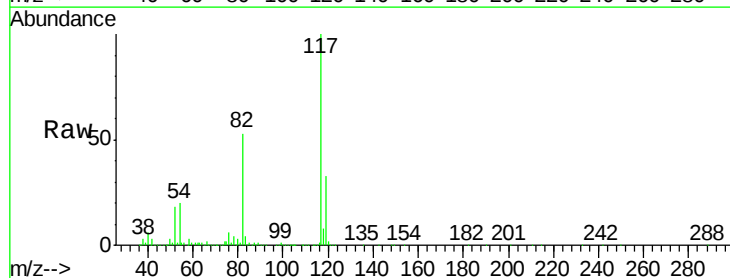
Tgt Ion: 117 Resp: 782054

Ion Ratio Lower Upper

117 100

82 53.1 41.0 61.6

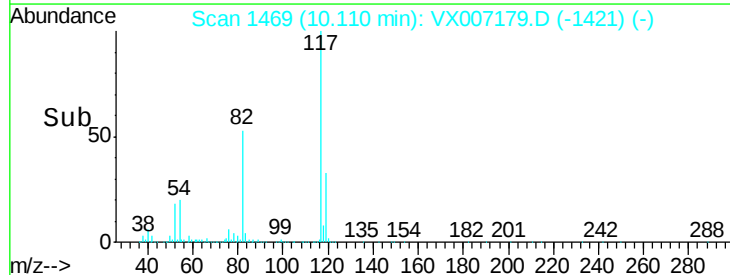
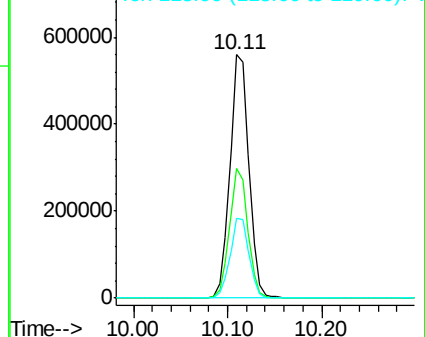
119 32.7 25.4 38.0

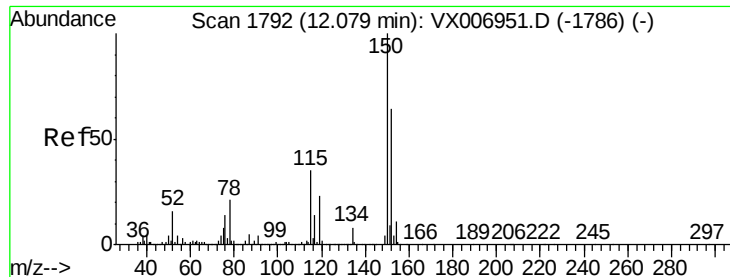


Abundance Ion 116.90 (116.60 to 117.60): VX006951.D (-1462) (-)

Ion 82.00 (81.70 to 82.70): VX006951.D (-1462) (-)

Ion 118.90 (118.60 to 119.60): VX006951.D (-1462) (-)



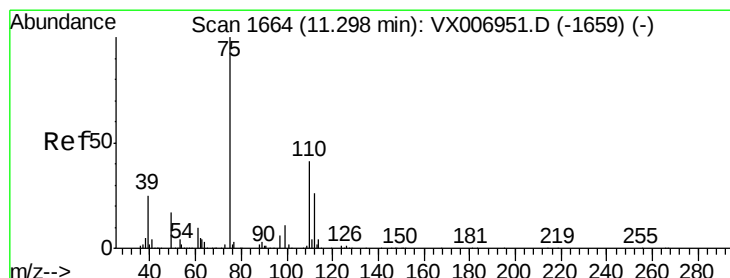
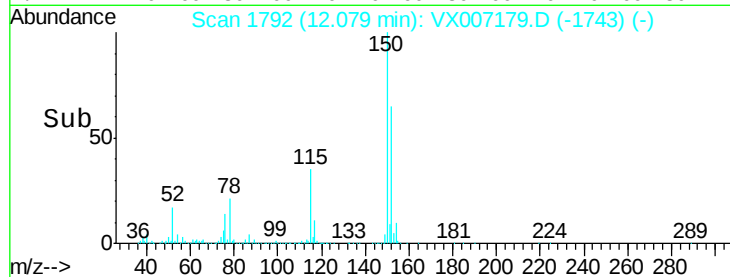
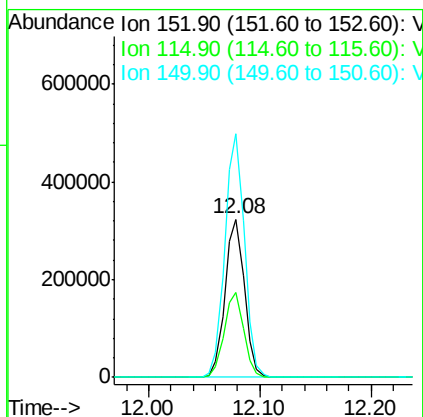
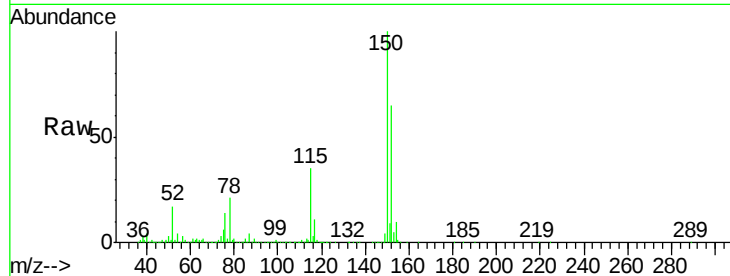


#72

1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX007179.D  
Acq: 22 Jan 2019 14:09

Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-TW527-3337

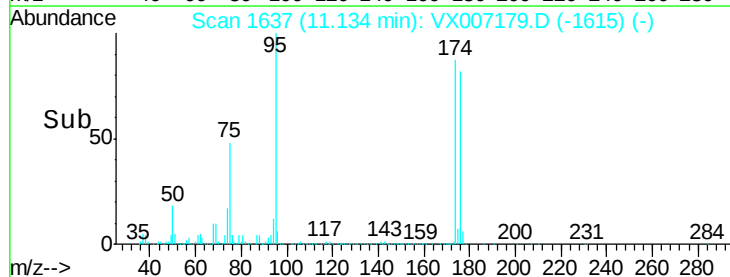
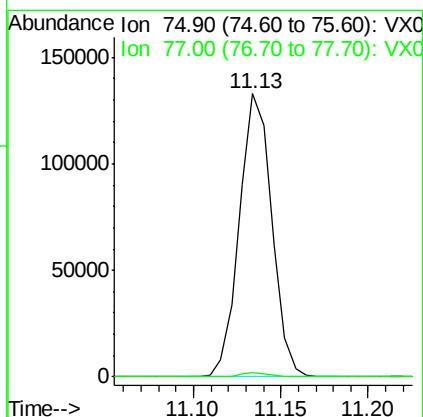
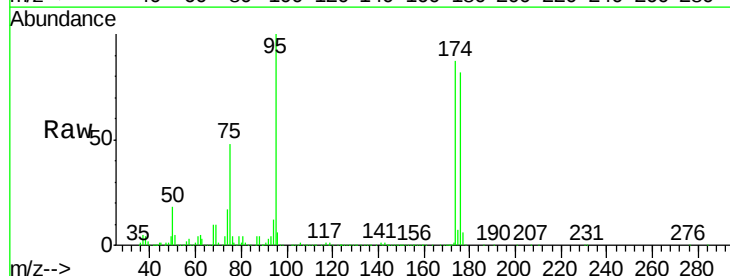
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 54.3  | 39.1  | 117.2 |
| 150     | 155.2 | 0.0   | 344.8 |

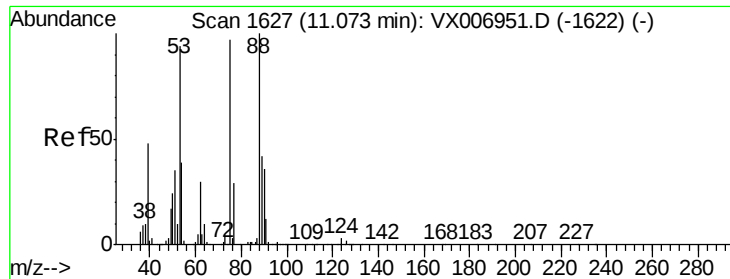


#76

1,2,3-Trichloropropane  
Concen: 21.673 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.16 min  
Lab File: VX007179.D  
Acq: 22 Jan 2019 14:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.4   | 18.5  | 55.5# |





#81

trans-1,4-Dichloro-2-butene

Concen: 64.239 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

SA-TW527-3337

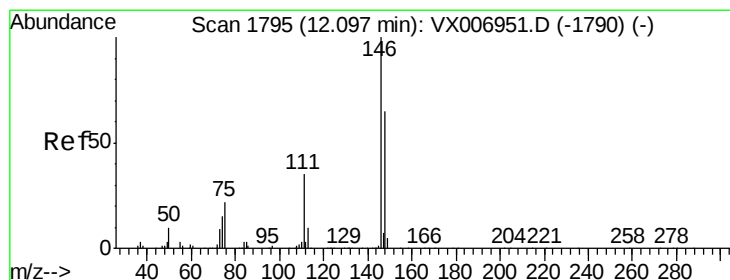
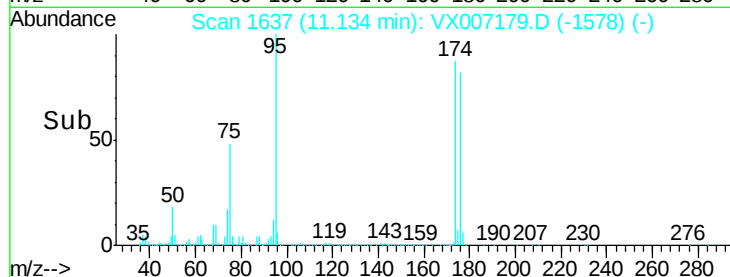
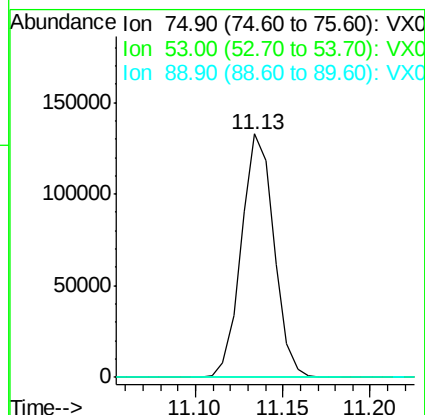
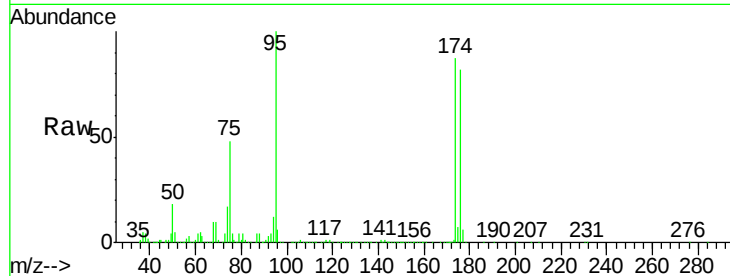
Tot Ion: 75 Resp: 171752

Ion Ratio Lower Upper

75 100

53 0.3 79.7 119.5#

89 0.2 38.0 57.0#



#88

1,4-Dichlorobenzene

Concen: 0.224 ug/l

RT: 12.09 min Scan# 1794

Delta R.T. -0.01 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

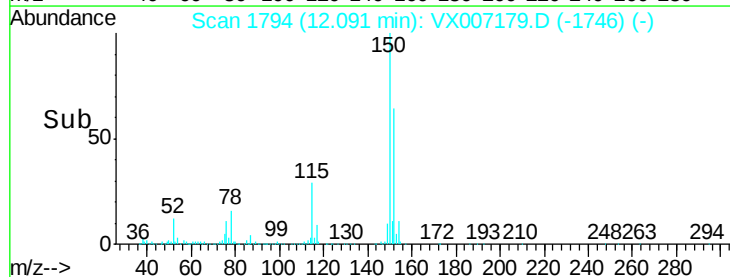
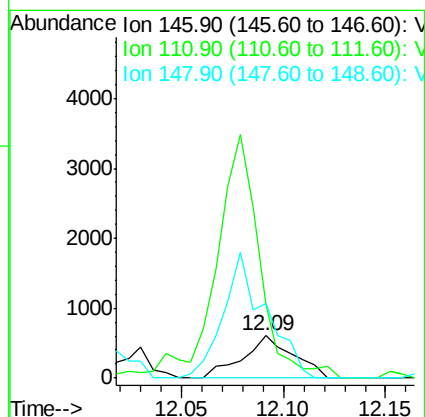
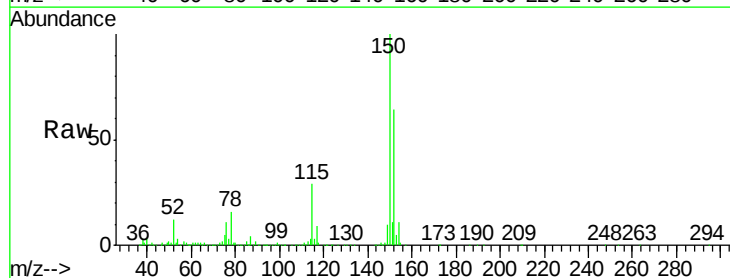
Tgt Ion: 146 Resp: 1035

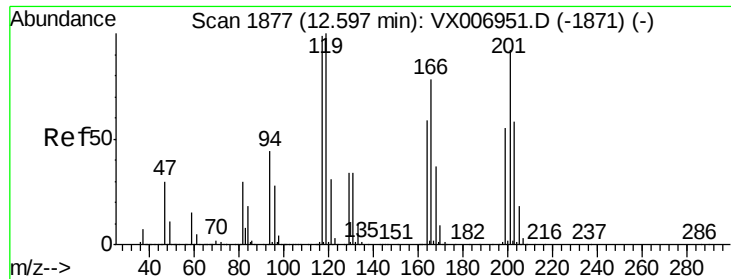
Ion Ratio Lower Upper

146 100

111 501.5 18.1 54.1#

148 250.9 31.9 95.9#





#90

Hexachloroethane

Concen: 2.921 ug/l

RT: 12.58 min Scan# 1874

Delta R.T. -0.02 min

Lab File: VX007179.D

Acq: 22 Jan 2019 14:09

Instrument :

MSVOA\_X

ClientSampleId :

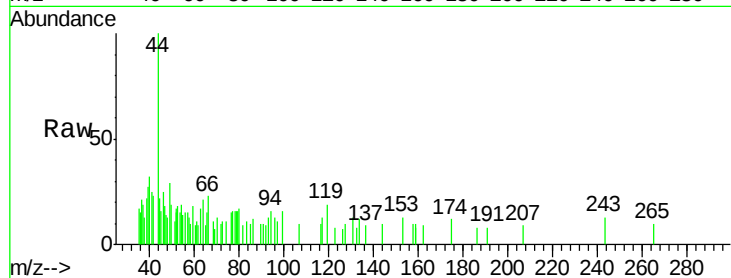
SA-TW527-3337

Tot Ion:117 Resp: 55

Ion Ratio Lower Upper

117 100

201 0.0 42.9 128.7#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V

