

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX072619\  
 Data File : VX011117.D  
 Acq On : 27 Jul 2019 02:43  
 Operator : JC/SP  
 Sample : K4017-06  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 43 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SU19-MSW0104-9001

Quant Time: Jul 27 04:28:01 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 24 05:39:23 2019  
 Response via : Initial Calibration

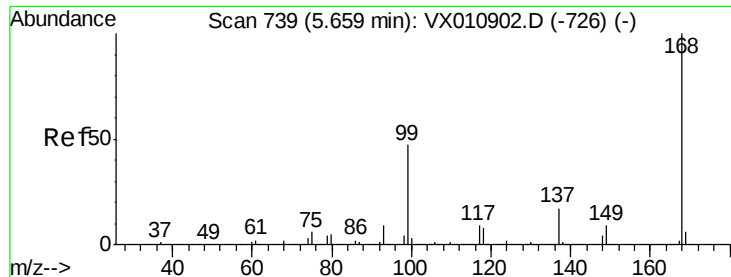
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 189533   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 302882   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 280643   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 129981   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 104689   | 51.92 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.84% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 95351    | 49.60 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.20%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 364907   | 50.61 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.22% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 126123   | 47.59 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.18%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.20  | 85   | 61       | 0.576  | ug/l # | 43     |
| 3) Chloromethane               | 1.32  | 50   | 451      | 0.259  | ug/l # | 68     |
| 5) Bromomethane                | 1.66  | 94   | 688      | 0.687  | ug/l # | 73     |
| 6) Chloroethane                | 1.70  | 64   | 437      | 0.387  | ug/l # | 82     |
| 11) Tert butyl alcohol         | 3.04  | 59   | 603      | 1.284  | ug/l # | 82     |
| 13) Acrolein                   | 2.28  | 56   | 215      | 0.792  | ug/l # | 15     |
| 16) Acetone                    | 2.45  | 43   | 3589     | 3.941  | ug/l   | 97     |
| 18) Methyl Acetate             | 2.77  | 43   | 469      | 0.226  | ug/l # | 60     |
| 29) Tetrahydrofuran            | 5.14  | 42   | 170      | 0.205  | ug/l # | 81     |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 13094    | 5.263  | ug/l # | 39     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 17535    | 6.764  | ug/l # | 17     |
| 44) Trichloroethene            | 7.21  | 130  | 586      | 0.260  | ug/l   | 78     |
| 49) 1,4-Dioxane                | 7.77  | 88   | 21       | 0.368  | ug/l # | 1      |
| 52) Toluene                    | 8.79  | 92   | 1848     | 0.369  | ug/l   | 96     |
| 60) Dibromochloromethane       | 9.32  | 129  | 51       | 2.548  | ug/l # | 11     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 64224    | 27.381 | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 64224    | 67.829 | ug/l # | 11     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

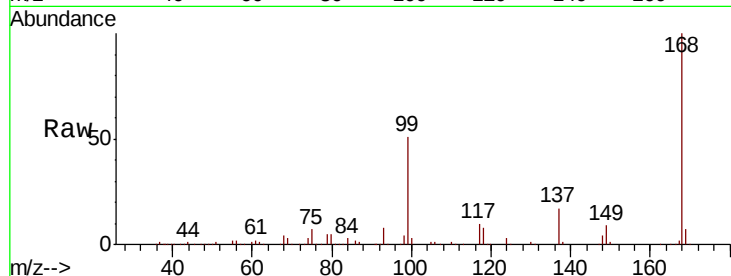
SU19-MSW0104-9001

Tot Ion:168 Resp: 189533

Ion Ratio Lower Upper

168 100

99 50.7 37.6 56.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

60000

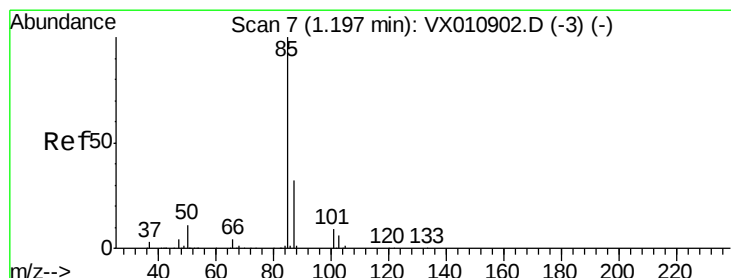
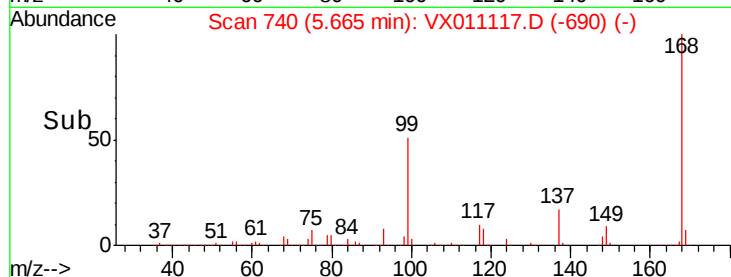
40000

20000

0

5.60 5.70 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.576 ug/l

RT: 1.20 min Scan# 7

Delta R.T. 0.00 min

Lab File: VX011117.D

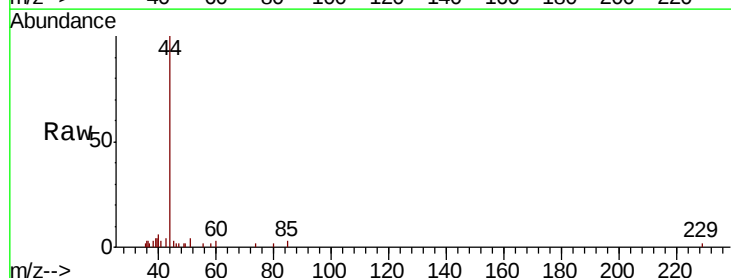
Acq: 27 Jul 2019 02:43

Tgt Ion: 85 Resp: 61

Ion Ratio Lower Upper

85 100

87 0.0 15.9 47.7#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.20

100

80

60

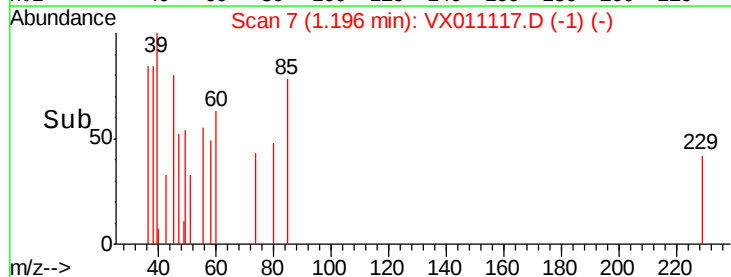
40

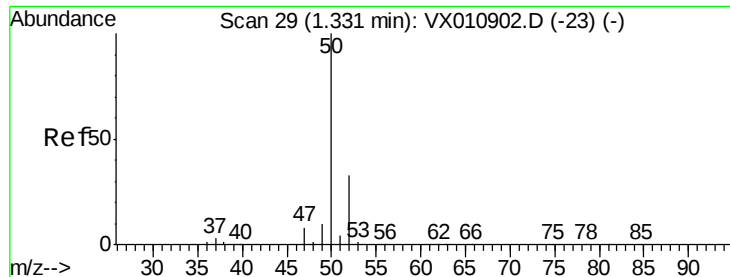
20

0

1.18 1.20 1.22

Time-->





#3

Chloromethane

Concen: 0.259 ug/l

RT: 1.32 min Scan# 28

Delta R.T. -0.01 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

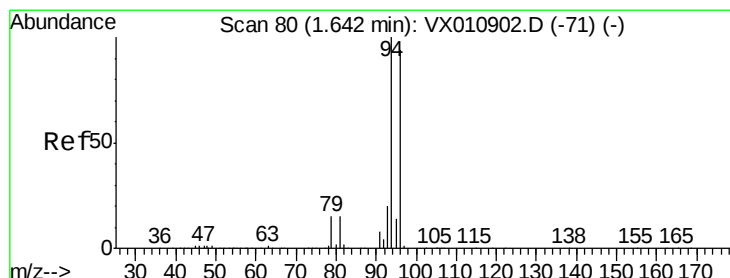
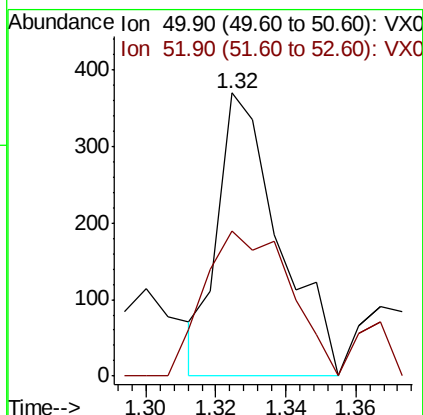
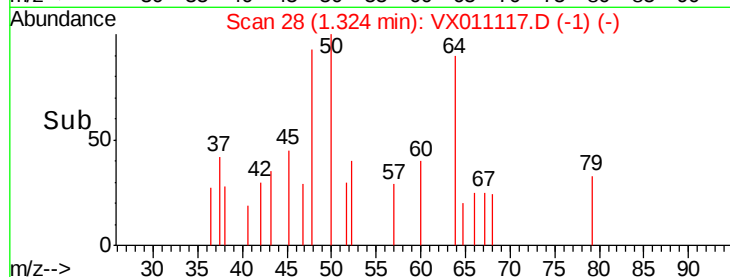
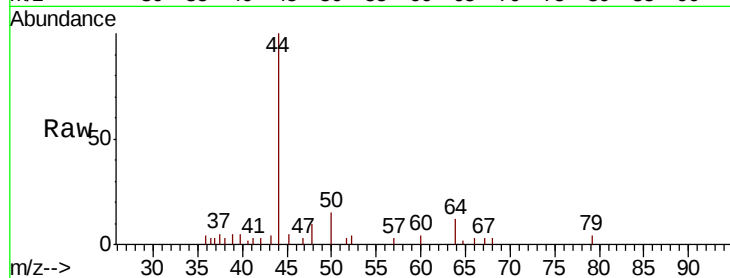
SU19-MSW0104-9001

Tot Ion: 50 Resp: 451

Ion Ratio Lower Upper

50 100

52 51.2 26.4 39.6#



#5

Bromomethane

Concen: 0.687 ug/l

RT: 1.66 min Scan# 83

Delta R.T. 0.02 min

Lab File: VX011117.D

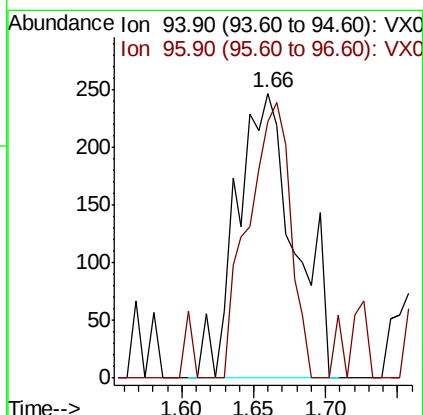
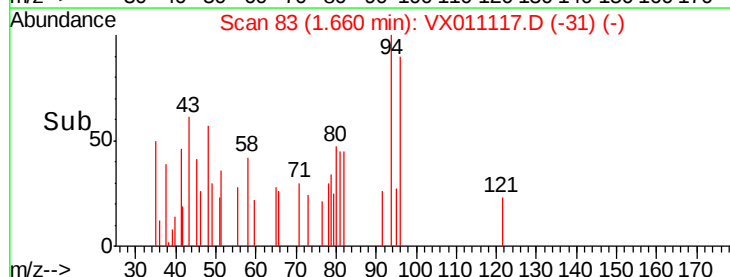
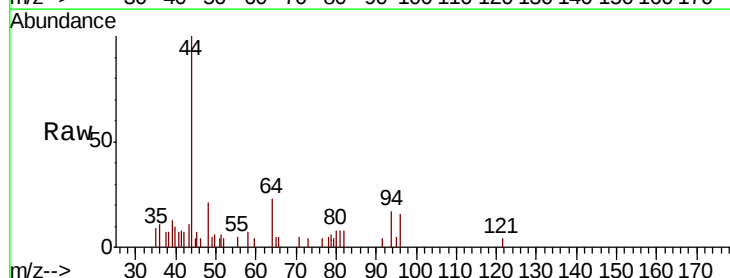
Acq: 27 Jul 2019 02:43

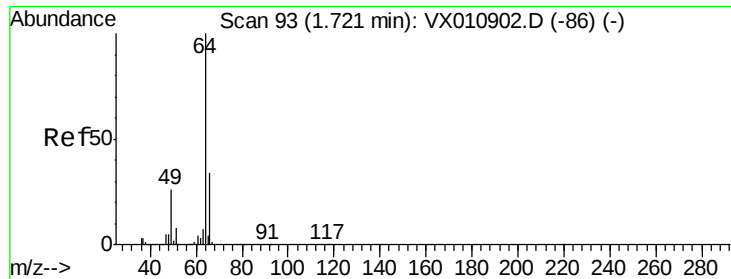
Tgt Ion: 94 Resp: 688

Ion Ratio Lower Upper

94 100

96 68.4 75.6 113.4#





#6

Chloroethane

Concen: 0.387 ug/l

RT: 1.70 min Scan# 89

Delta R.T. -0.02 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

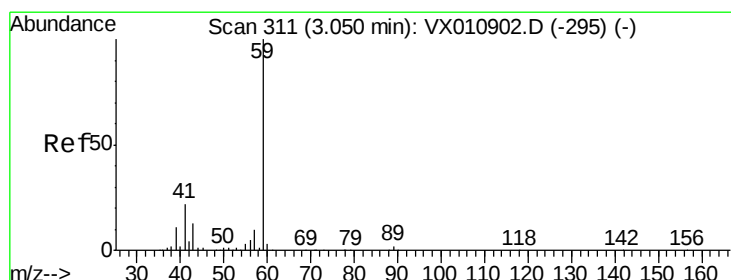
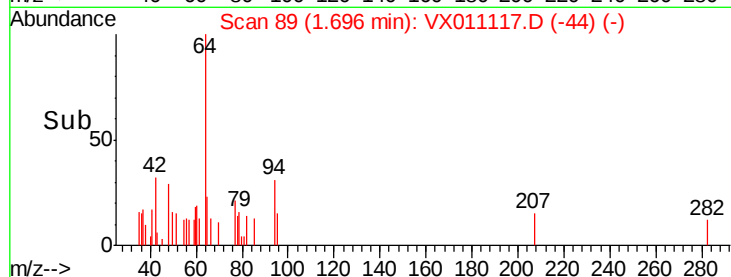
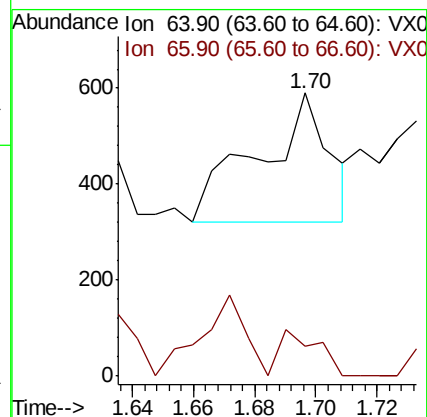
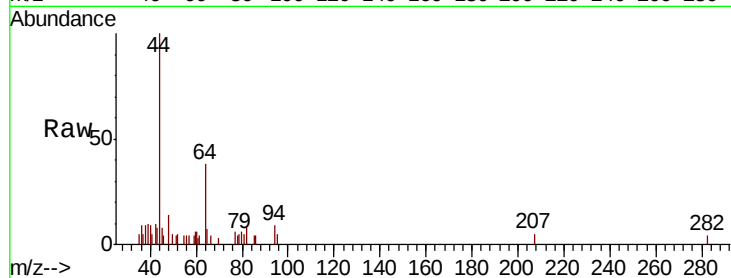
SU19-MSW0104-9001

Tot Ion: 64 Resp: 437

Ion Ratio Lower Upper

64 100

66 23.3 27.0 40.6#



#11

Tert butyl alcohol

Concen: 1.284 ug/l

RT: 3.04 min Scan# 310

Delta R.T. -0.01 min

Lab File: VX011117.D

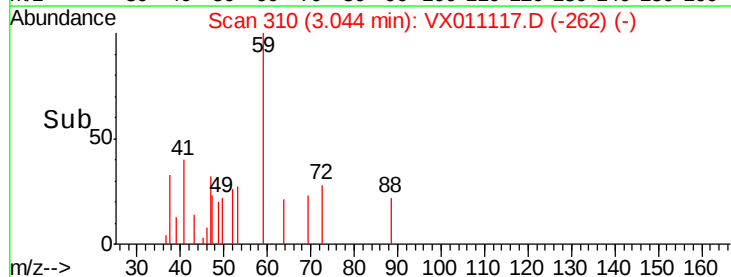
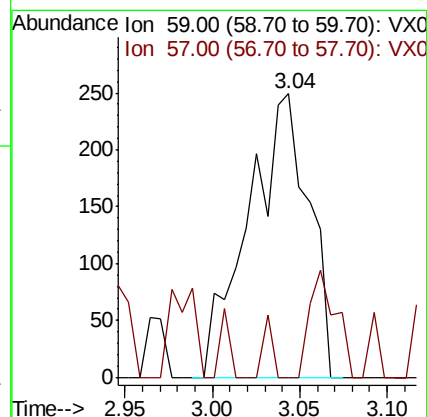
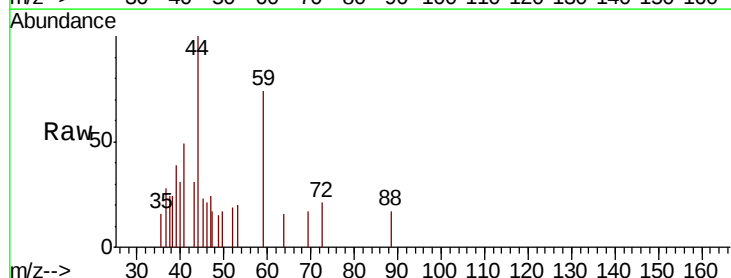
Acq: 27 Jul 2019 02:43

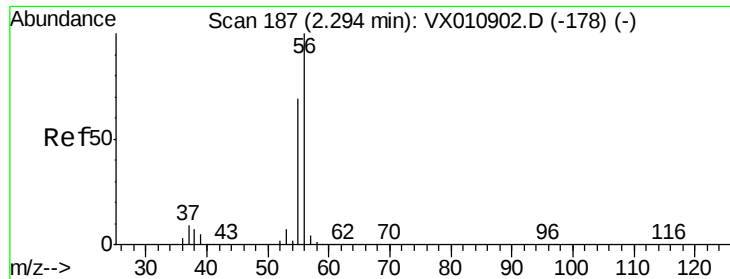
Tgt Ion: 59 Resp: 603

Ion Ratio Lower Upper

59 100

57 3.3 7.9 11.9#

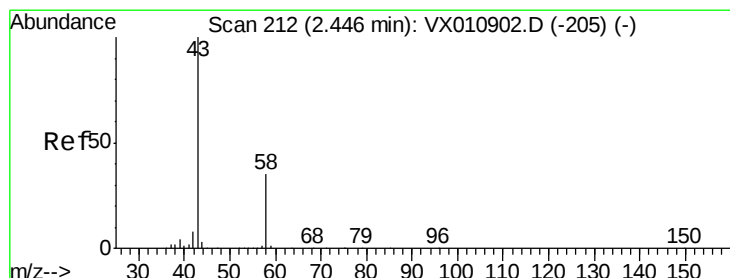
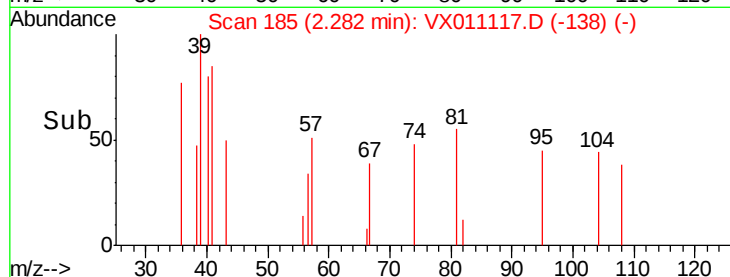
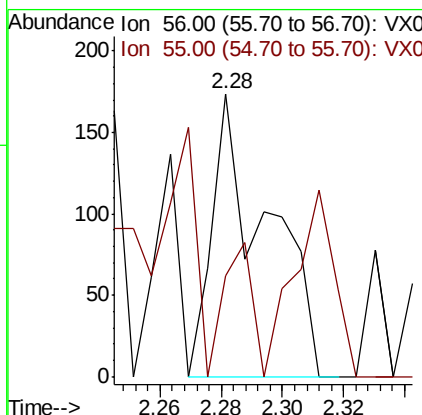
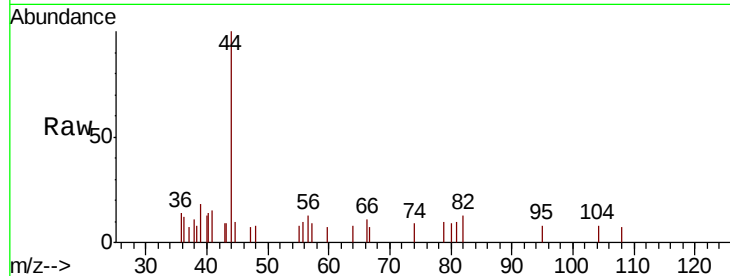




#13  
Acrolein  
Concen: 0.792 ug/l  
RT: 2.28 min Scan# 185  
Delta R.T. -0.01 min  
Lab File: VX011117.D  
Acq: 27 Jul 2019 02:43

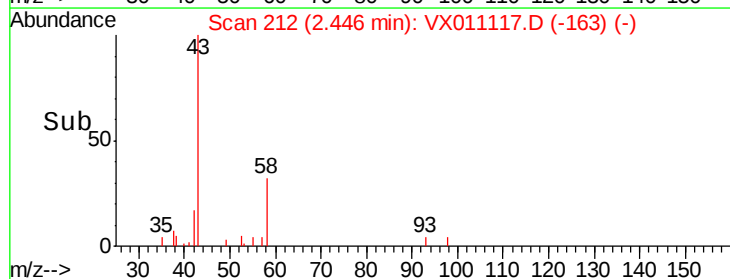
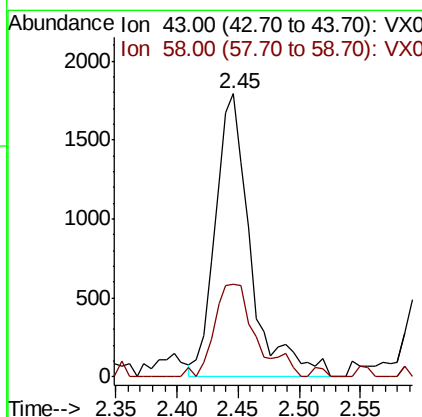
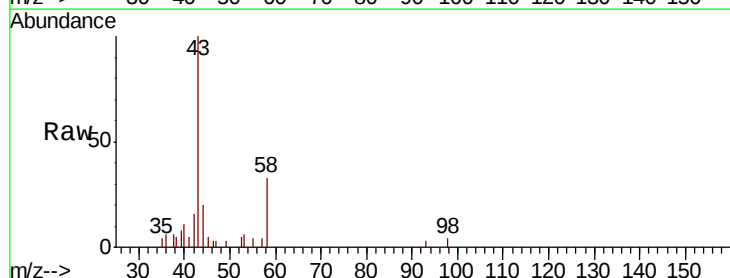
Instrument :  
MSVOA\_X  
ClientSampleId :  
SU19-MSW0104-9001

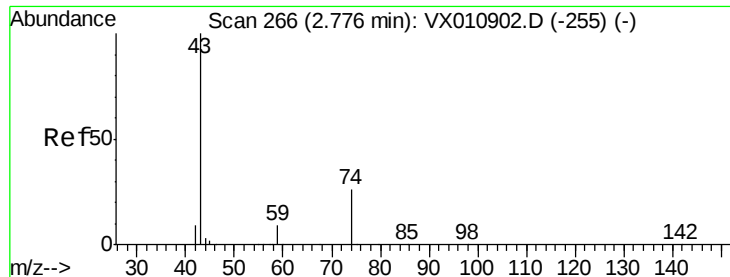
Tot Ion: 56 Resp: 215  
Ion Ratio Lower Upper  
56 100  
55 0.0 55.9 83.9#



#16  
Acetone  
Concen: 3.941 ug/l  
RT: 2.45 min Scan# 212  
Delta R.T. -0.00 min  
Lab File: VX011117.D  
Acq: 27 Jul 2019 02:43

Tgt Ion: 43 Resp: 3589  
Ion Ratio Lower Upper  
43 100  
58 32.8 27.7 41.5

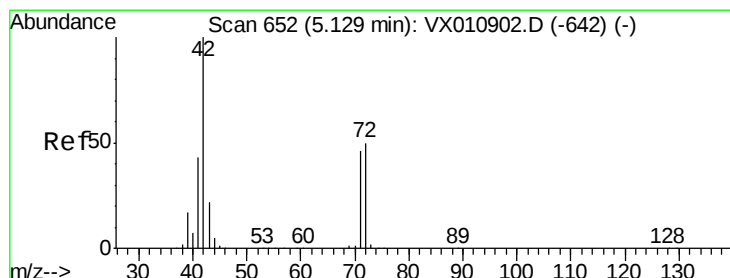
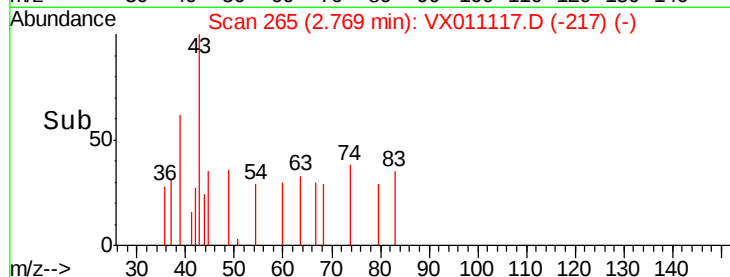
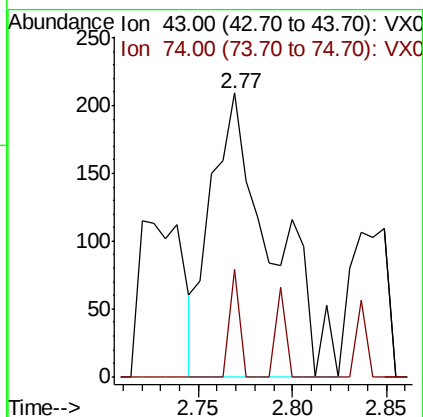
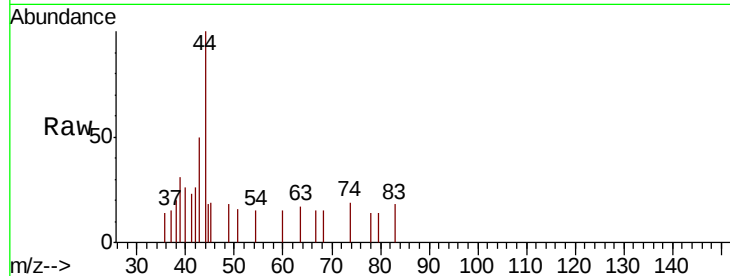




#18  
Methyl Acetate  
Concen: 0.226 ug/l  
RT: 2.77 min Scan# 265  
Delta R.T. -0.01 min  
Lab File: VX011117.D  
Acq: 27 Jul 2019 02:43

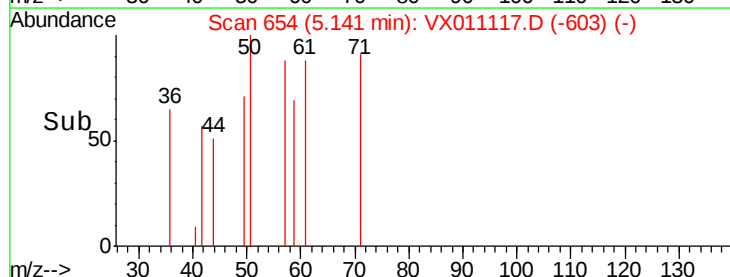
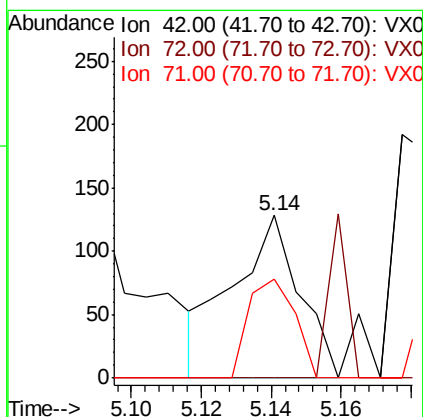
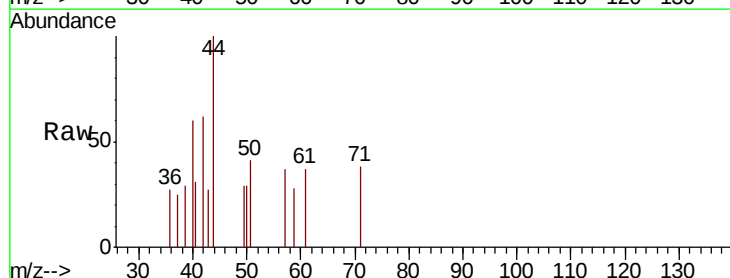
Instrument :  
MSVOA\_X  
ClientSampleId :  
SU19-MSW0104-9001

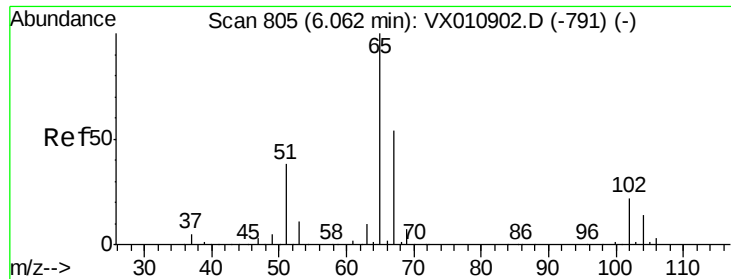
Tot Ion: 43 Resp: 469  
Ion Ratio Lower Upper  
43 100  
74 6.2 21.5 32.3#



#29  
Tetrahydrofuran  
Concen: 0.205 ug/l  
RT: 5.14 min Scan# 654  
Delta R.T. 0.01 min  
Lab File: VX011117.D  
Acq: 27 Jul 2019 02:43

Tgt Ion: 42 Resp: 170  
Ion Ratio Lower Upper  
42 100  
72 28.2 39.8 59.8#  
71 42.4 37.0 55.4

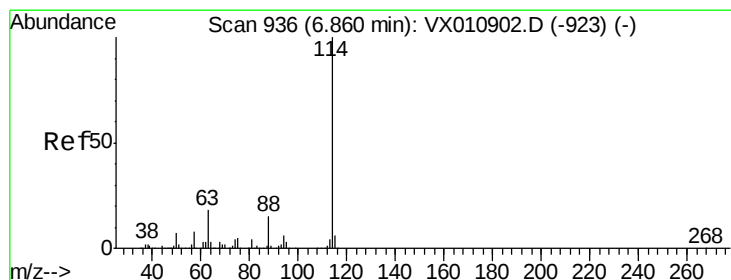
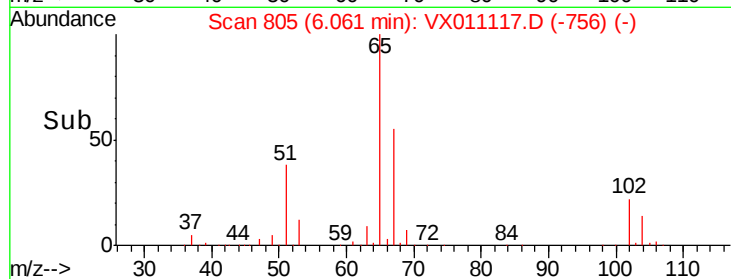
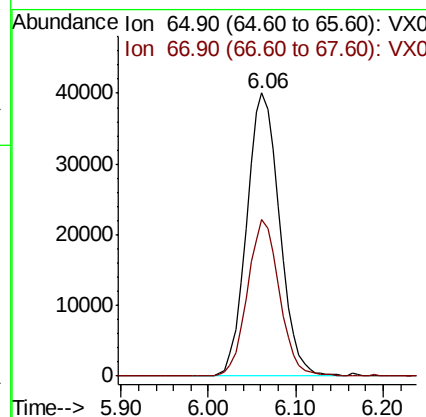
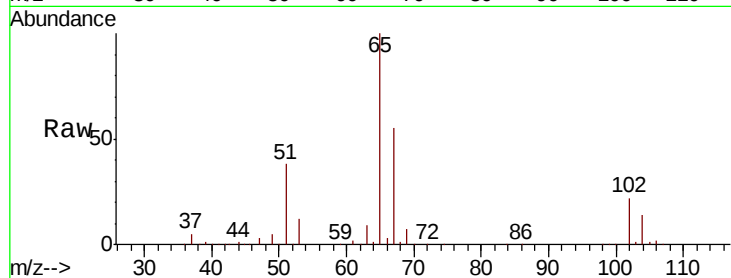




#33  
 1,2-Dichloroethane-d4  
 Concen: 51.920 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. -0.00 min  
 Lab File: VX011117.D  
 Acq: 27 Jul 2019 02:43

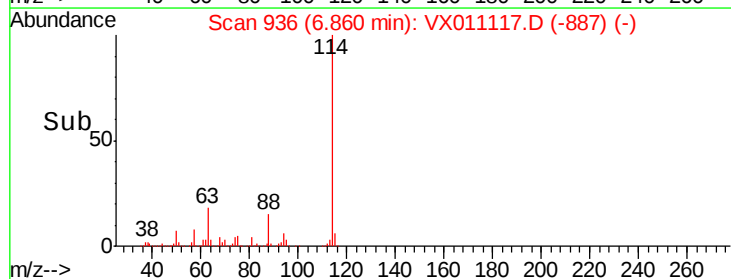
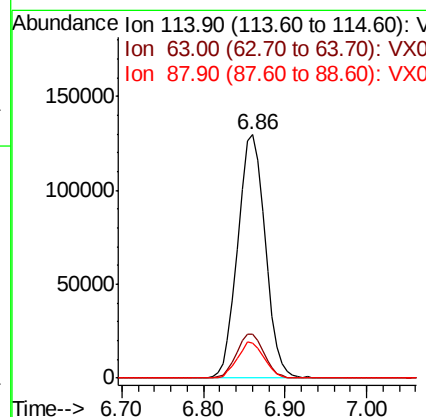
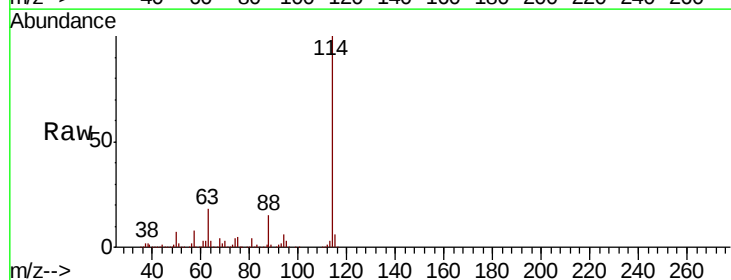
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SU19-MSW0104-9001

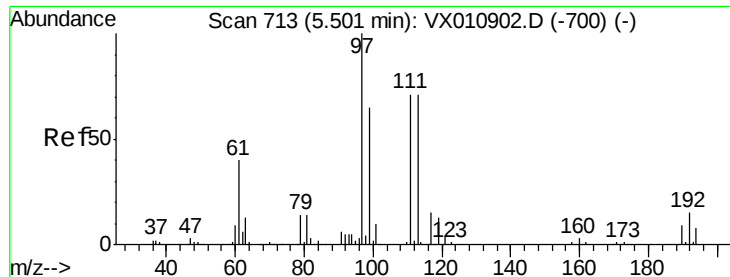
Tot Ion: 65 Resp: 104689  
 Ion Ratio Lower Upper  
 65 100  
 67 53.7 0.0 107.8



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX011117.D  
 Acq: 27 Jul 2019 02:43

Tgt Ion: 114 Resp: 302882  
 Ion Ratio Lower Upper  
 114 100  
 63 18.0 0.0 35.6  
 88 14.6 0.0 29.8





#35

Dibromofluoromethane

Concen: 49.599 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0104-9001

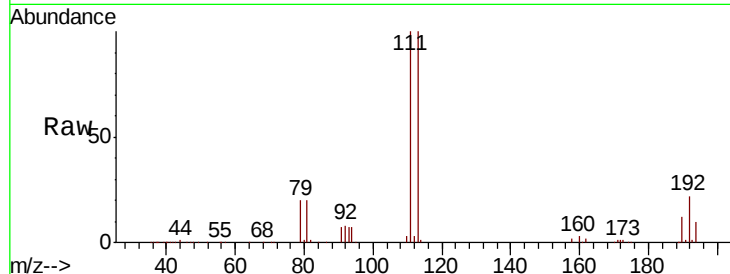
Tot Ion:113 Resp: 95351

Ion Ratio Lower Upper

113 100

111 102.3 82.3 123.5

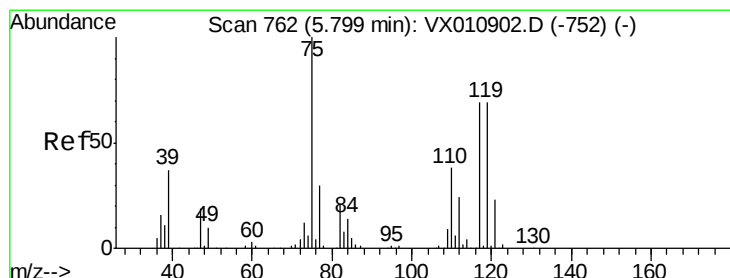
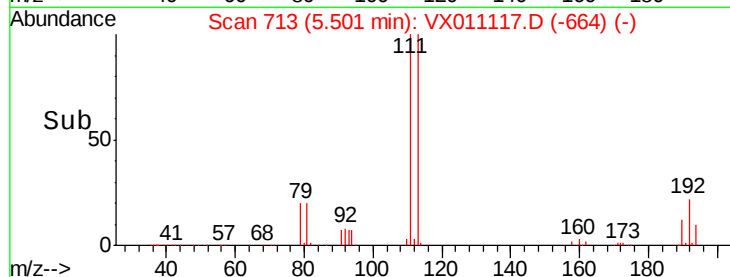
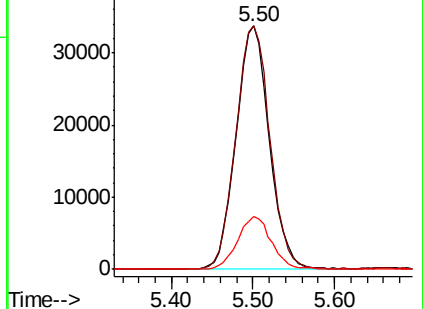
192 22.0 17.4 26.2



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



#36

1,1-Dichloropropene

Concen: 5.263 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

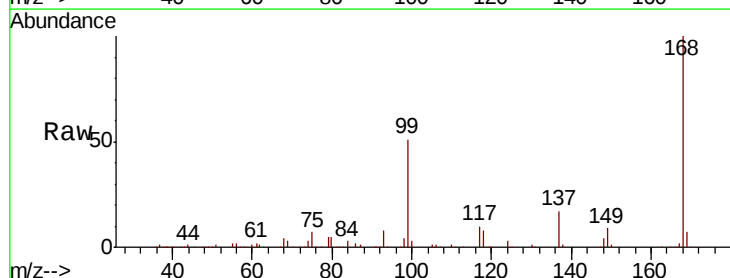
Tgt Ion: 75 Resp: 13094

Ion Ratio Lower Upper

75 100

110 0.0 19.9 59.7#

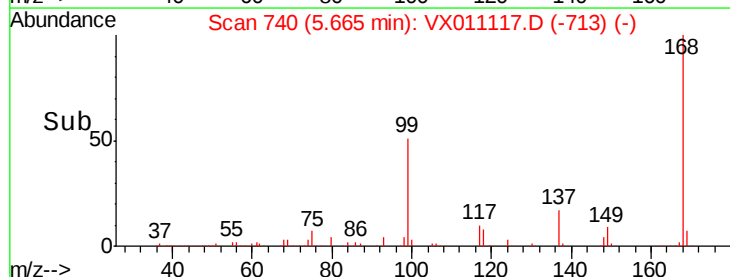
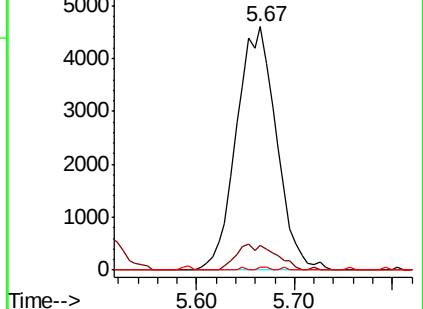
77 0.3 25.0 37.4#

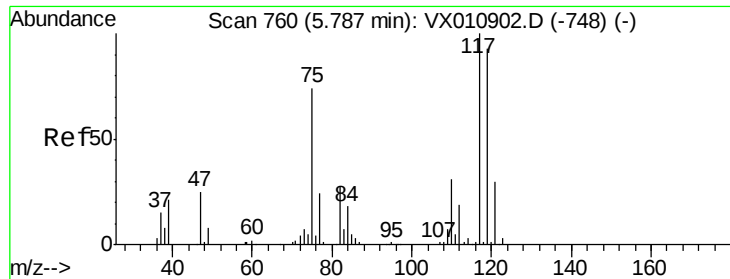


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.764 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0104-9001

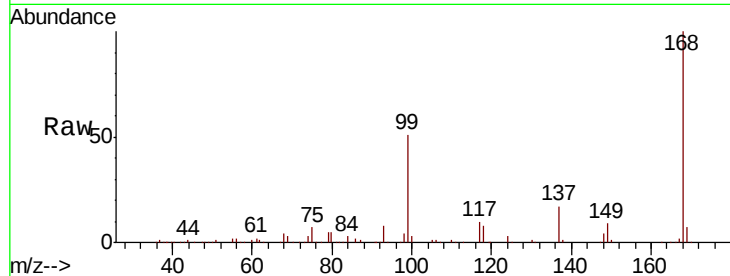
Tot Ion:117 Resp: 17535

Ion Ratio Lower Upper

117 100

119 4.6 74.2 111.2#

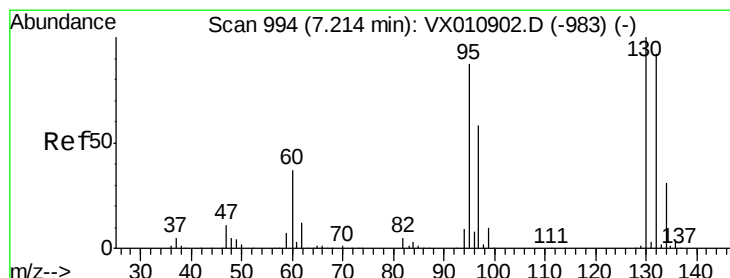
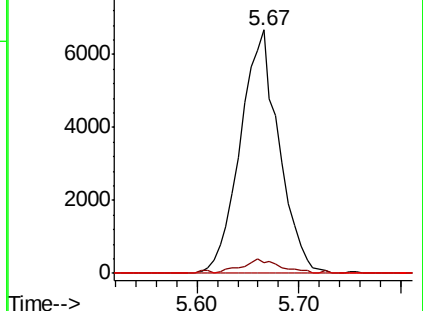
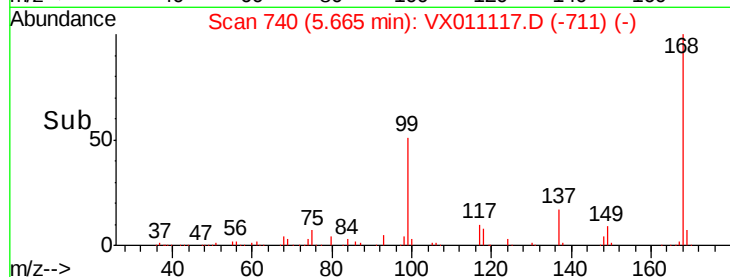
121 0.0 24.2 36.2#



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



#44

Trichloroethene

Concen: 0.260 ug/l

RT: 7.21 min Scan# 994

Delta R.T. -0.00 min

Lab File: VX011117.D

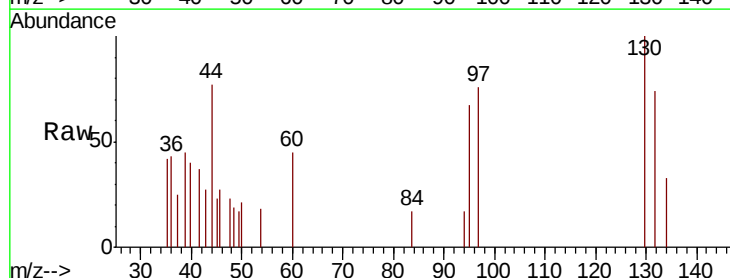
Acq: 27 Jul 2019 02:43

Tgt Ion:130 Resp: 586

Ion Ratio Lower Upper

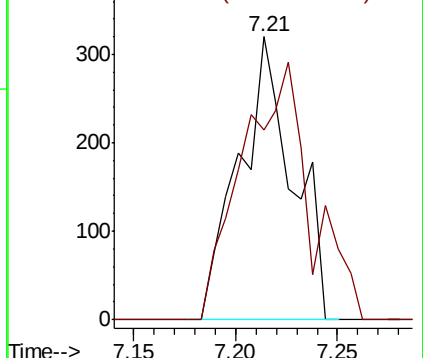
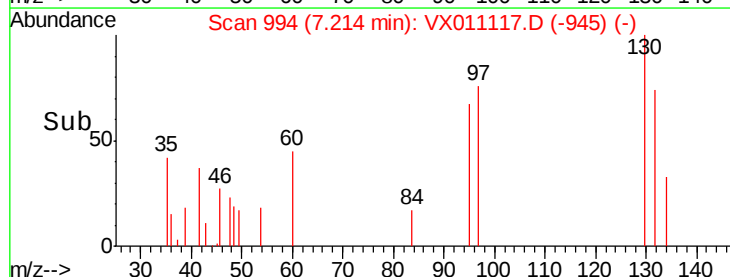
130 100

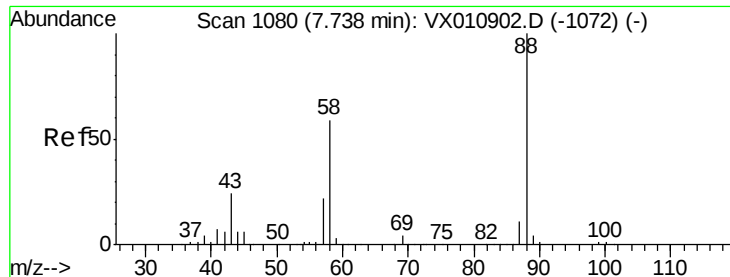
95 66.9 0.0 174.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0





#49

1,4-Dioxane

Concen: 0.368 ug/l

RT: 7.77 min Scan# 1086

Delta R.T. 0.04 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0104-9001

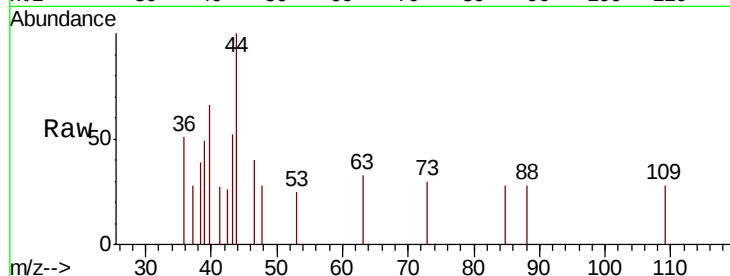
Tot Ion: 88 Resp: 21

Ion Ratio Lower Upper

88 100

43 547.6 22.9 34.3#

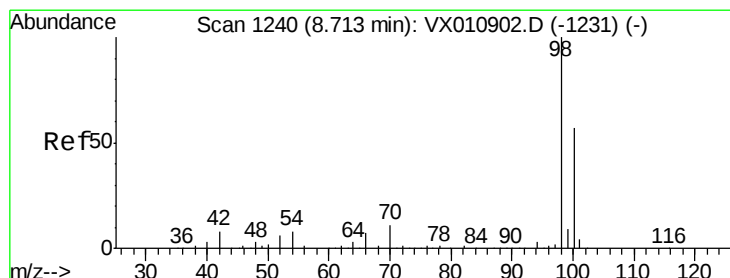
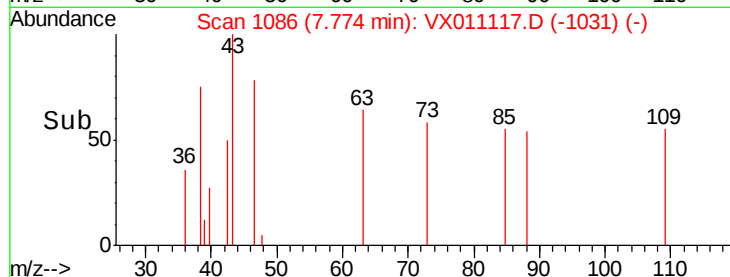
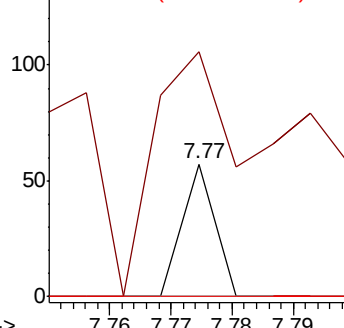
58 0.0 49.8 74.8#



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: 50.608 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX011117.D

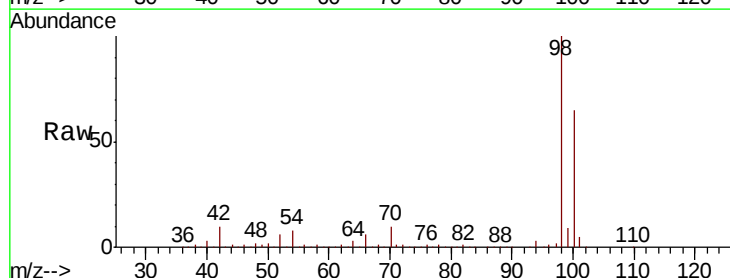
Acq: 27 Jul 2019 02:43

Tgt Ion: 98 Resp: 364907

Ion Ratio Lower Upper

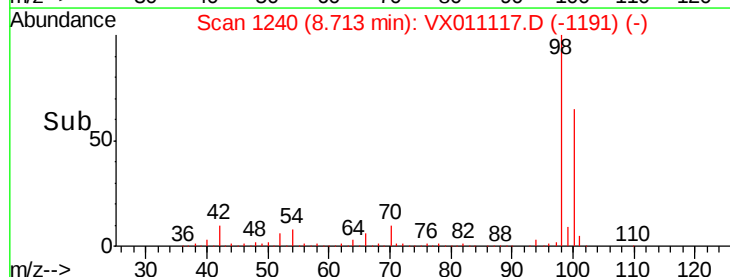
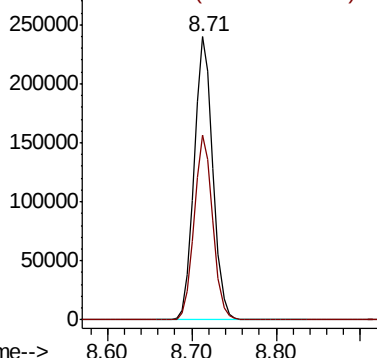
98 100

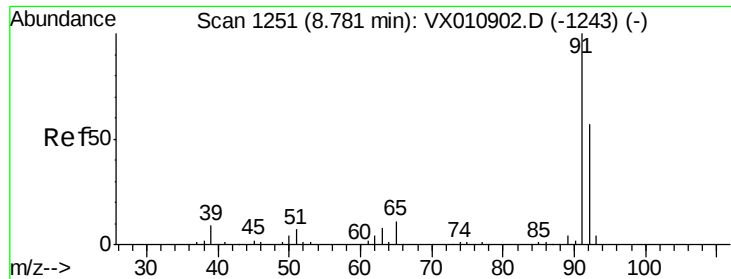
100 64.6 50.6 75.8



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V





#52

Toluene

Concen: 0.369 ug/l

RT: 8.79 min Scan# 1252

Delta R.T. 0.01 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

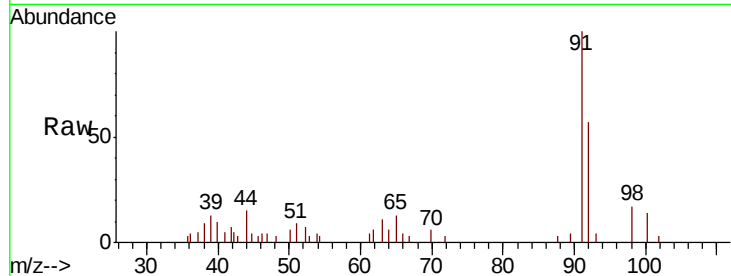
SU19-MSW0104-9001

Tot Ion: 92 Resp: 1848

Ion Ratio Lower Upper

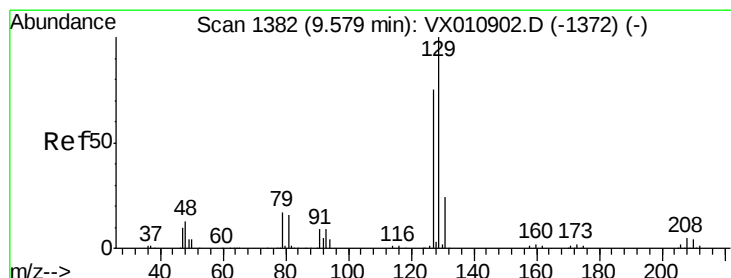
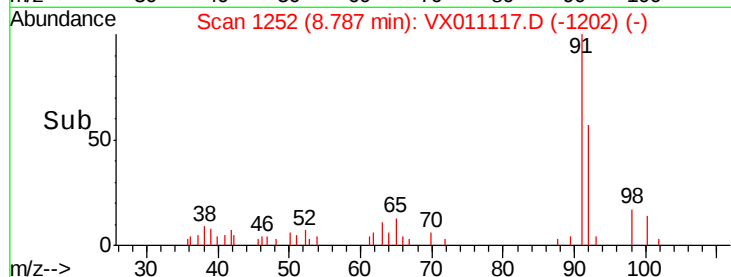
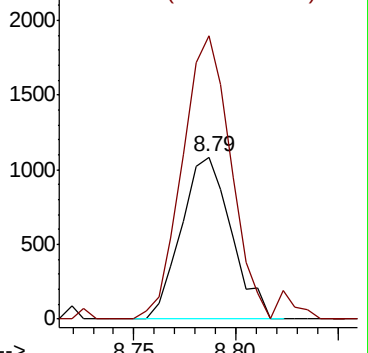
92 100

91 168.6 139.4 209.0



Abundance Ion 92.00 (91.70 to 92.70): VX010902.D (-1243) (-)

Ion 91.00 (90.70 to 91.70): VX010902.D (-1243) (-)



#60

Dibromochloromethane

Concen: 2.548 ug/l

RT: 9.32 min Scan# 1340

Delta R.T. -0.26 min

Lab File: VX011117.D

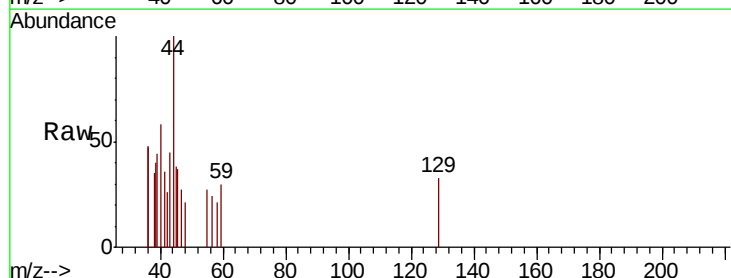
Acq: 27 Jul 2019 02:43

Tgt Ion: 129 Resp: 51

Ion Ratio Lower Upper

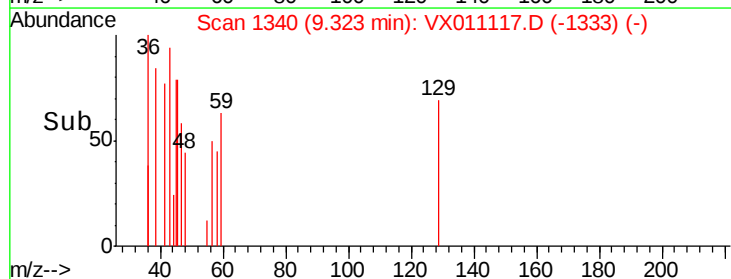
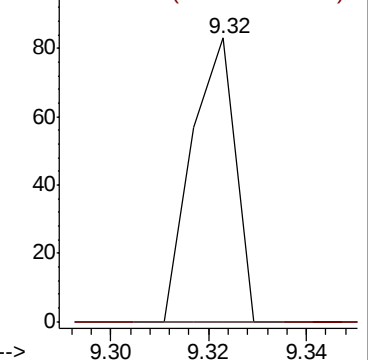
129 100

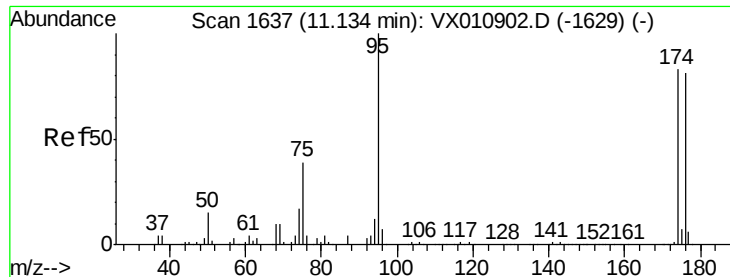
127 0.0 38.6 115.8#



Abundance Ion 128.80 (128.50 to 129.50): VX010902.D (-1372) (-)

Ion 126.80 (126.50 to 127.50): VX010902.D (-1372) (-)





#62

4-Bromofluorobenzene

Concen: 47.588 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0104-9001

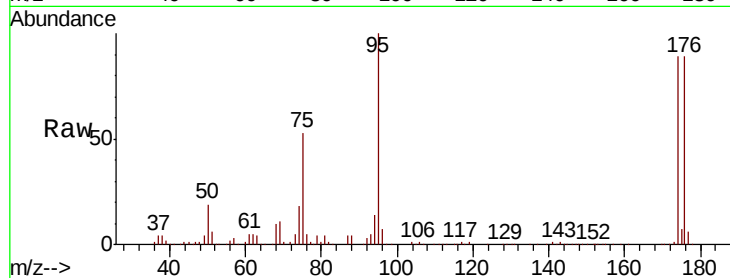
Tot Ion: 95 Resp: 126123

Ion Ratio Lower Upper

95 100

174 91.9 0.0 180.6

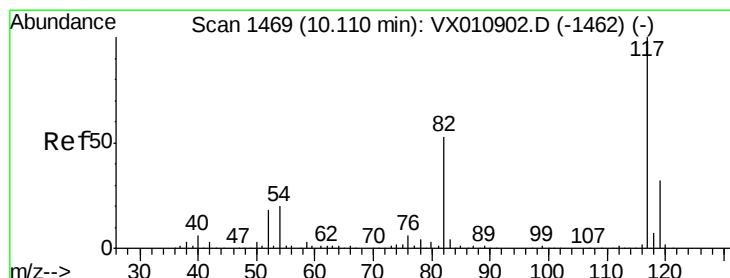
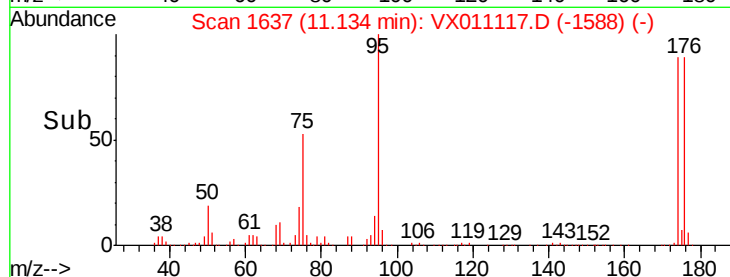
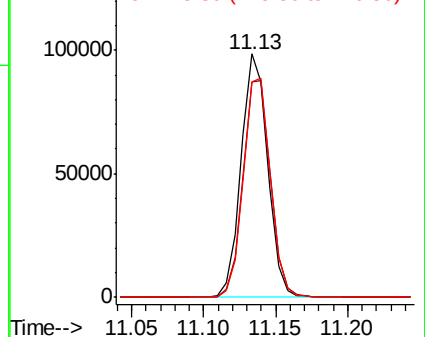
176 91.5 0.0 173.8



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

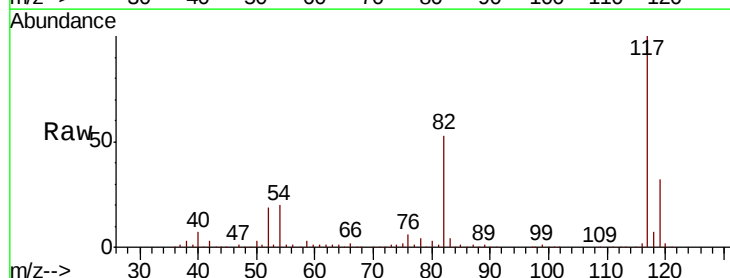
Tgt Ion: 117 Resp: 280643

Ion Ratio Lower Upper

117 100

82 53.0 42.6 63.8

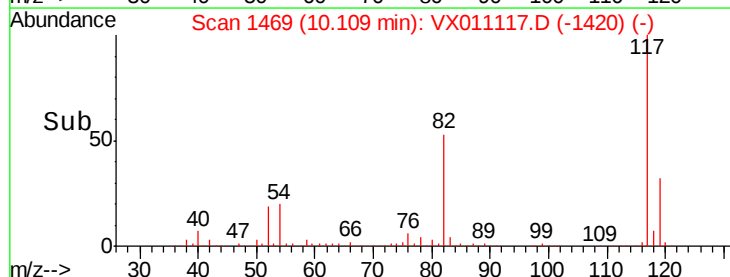
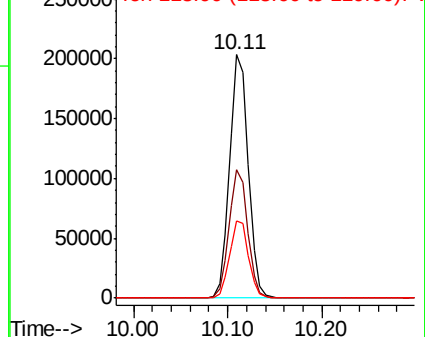
119 31.5 25.9 38.9

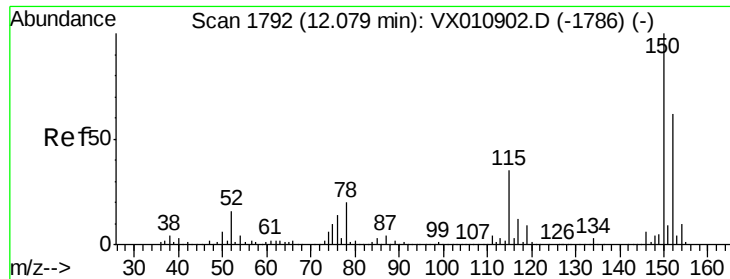


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V



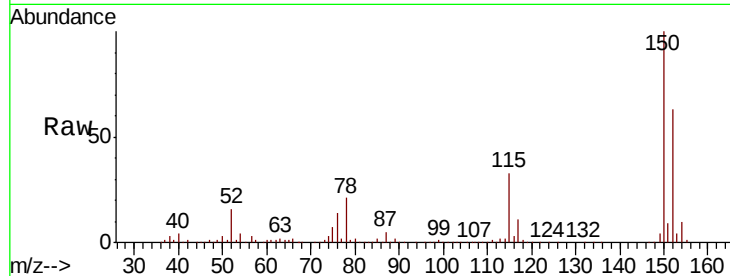


#72

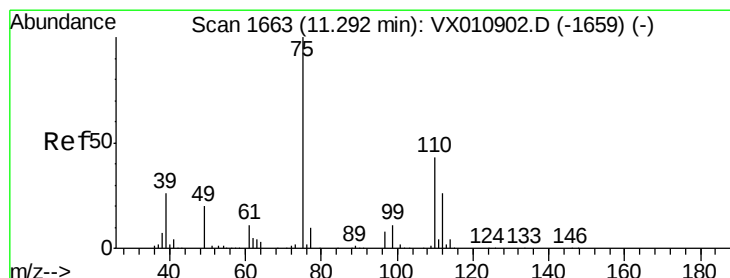
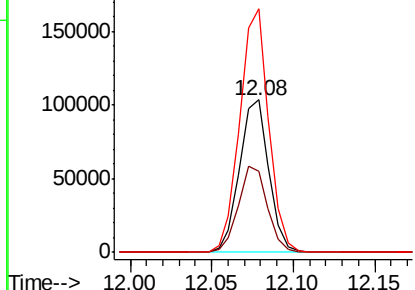
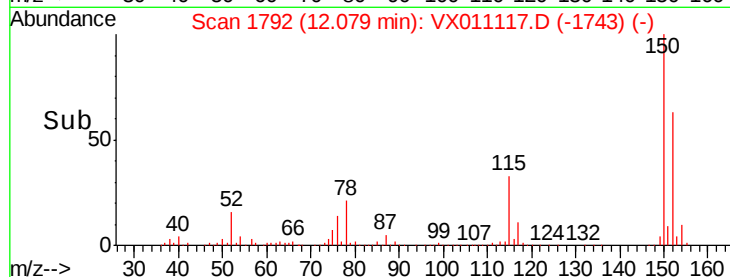
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. -0.00 min  
Lab File: VX011117.D  
Acq: 27 Jul 2019 02:43

Instrument :  
MSVOA\_X  
ClientSampleId :  
SU19-MSW0104-9001

Tot Ion:152 Resp: 129981  
Ion Ratio Lower Upper  
152 100  
115 56.0 39.7 119.1  
150 157.6 0.0 345.6



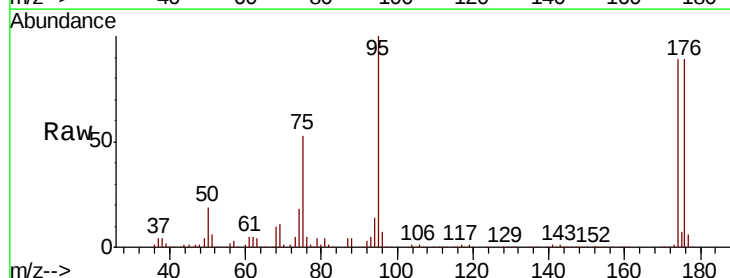
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



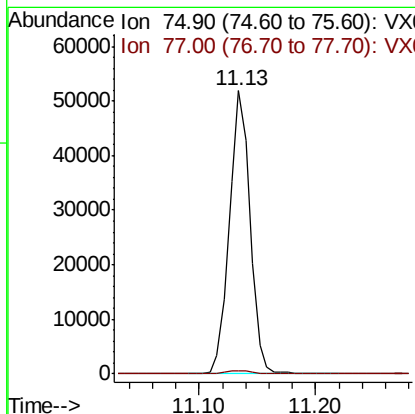
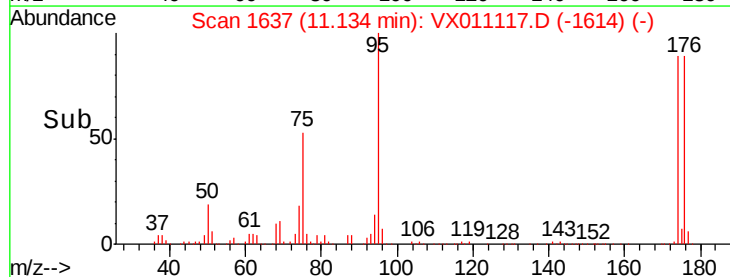
#76

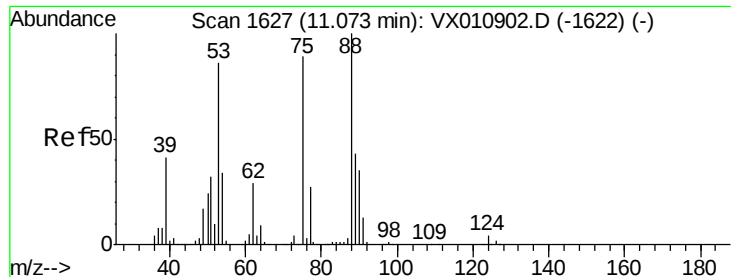
1,2,3-Trichloropropane  
Concen: 27.381 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.16 min  
Lab File: VX011117.D  
Acq: 27 Jul 2019 02:43

Tgt Ion: 75 Resp: 64224  
Ion Ratio Lower Upper  
75 100  
77 1.5 21.3 64.0#



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: 67.829 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011117.D

Acq: 27 Jul 2019 02:43

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0104-9001

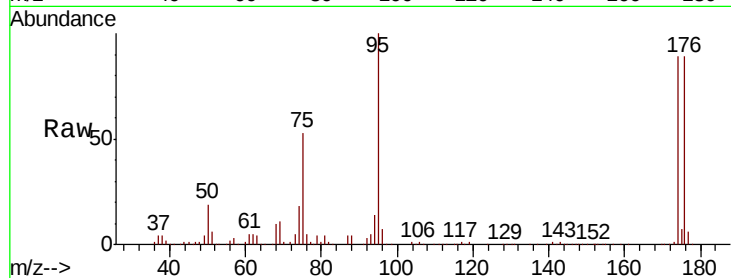
Tot Ion: 75 Resp: 64224

Ion Ratio Lower Upper

75 100

53 0.1 76.7 115.1#

89 0.0 38.5 57.7#



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

