

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX061019\  
 Data File : VX010181.D  
 Acq On : 10 Jun 2019 16:32  
 Operator : JC/SP  
 Sample : K3257-03DL 5X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE131D1-20190606DL

Quant Time: Jun 11 02:38:37 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X060719W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 08 02:12:13 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 255649   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 387546   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 351513   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 168648   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 114556   | 45.91 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.82%  |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 118884   | 49.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.46%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 457473   | 51.06 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.12% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 160783   | 48.05 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.10%  |      |

## Target Compounds

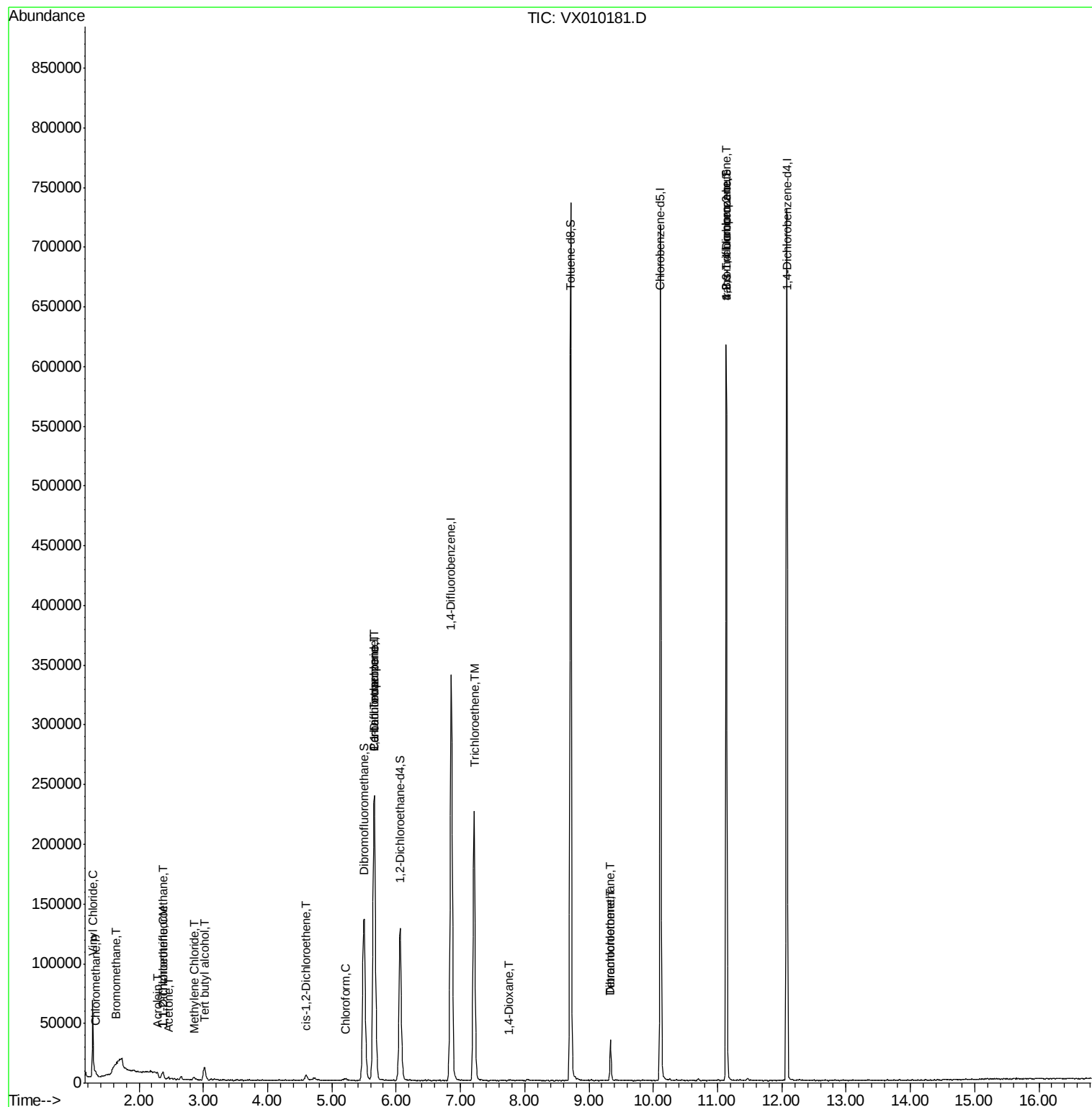
|                                |       |     |       |        |        | Qvalue |
|--------------------------------|-------|-----|-------|--------|--------|--------|
| 3) Chloromethane               | 1.32  | 50  | 611   | 0.262  | ug/l   | 89     |
| 4) Vinyl Chloride              | 1.28  | 62  | 581   | 0.265  | ug/l # | 1      |
| 5) Bromomethane                | 1.64  | 94  | 234   | 0.282  | ug/l # | 37     |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.37  | 101 | 1702  | 0.757  | ug/l # | 87     |
| 11) Tert butyl alcohol         | 3.01  | 59  | 6250  | 10.224 | ug/l # | 73     |
| 12) 1,1-Dichloroethene         | 2.36  | 96  | 585   | 0.255  | ug/l # | 73     |
| 13) Acrolein                   | 2.28  | 56  | 43    | 0.386  | ug/l # | 1      |
| 16) Acetone                    | 2.46  | 43  | 1063  | 0.906  | ug/l # | 42     |
| 20) Methylene Chloride         | 2.85  | 84  | 960   | 0.372  | ug/l # | 59     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96  | 2798  | 0.990  | ug/l   | 78     |
| 30) Chloroform                 | 5.21  | 83  | 1695  | 0.406  | ug/l # | 67     |
| 36) 1,1-Dichloropropene        | 5.65  | 75  | 15419 | 4.877  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.66  | 117 | 21438 | 5.990  | ug/l # | 16     |
| 44) Trichloroethene            | 7.21  | 130 | 95414 | 32.376 | ug/l   | 84     |
| 49) 1,4-Dioxane                | 7.76  | 88  | 386   | 5.263  | ug/l # | 78     |
| 60) Dibromochloromethane       | 9.34  | 129 | 6340  | 2.036  | ug/l # | 11     |
| 64) Tetrachloroethene          | 9.34  | 164 | 7126  | 2.729  | ug/l   | 87     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 72799 | 21.581 | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 72799 | 47.682 | ug/l # | 10     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX061019\  
Data File : VX010181.D  
Acq On : 10 Jun 2019 16:32  
Operator : JC/SP  
Sample : K3257-03DL 5X  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE131D1-20190606DL

Quant Time: Jun 11 02:38:37 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X060719W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 08 02:12:13 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: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

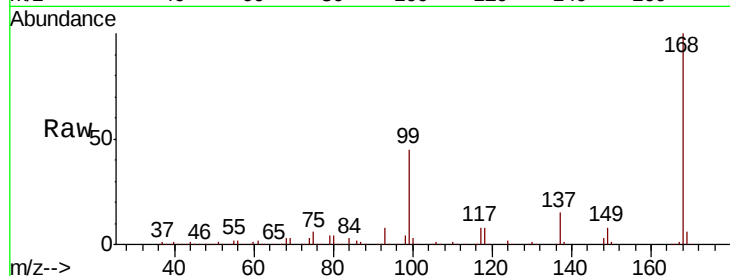
RE131D1-20190606DL

Tot Ion:168 Resp: 255649

Ion Ratio Lower Upper

168 100

99 45.4 43.0 64.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

100000

80000

60000

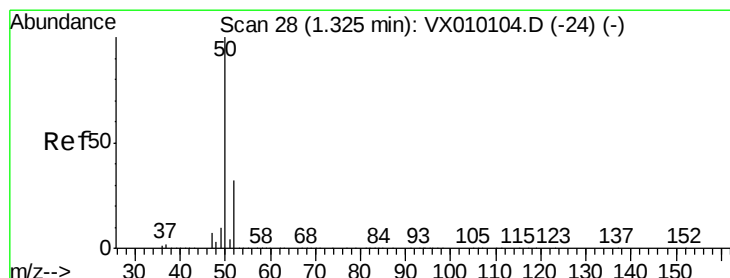
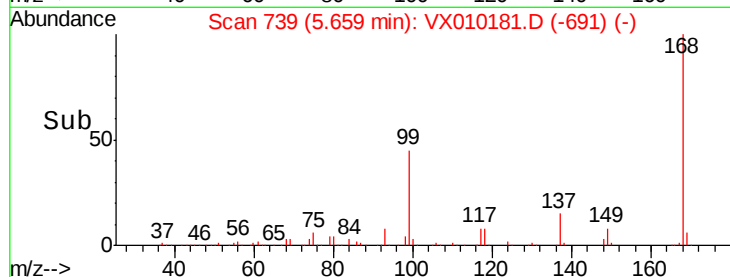
40000

20000

0

Time-->

5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.262 ug/l

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX010181.D

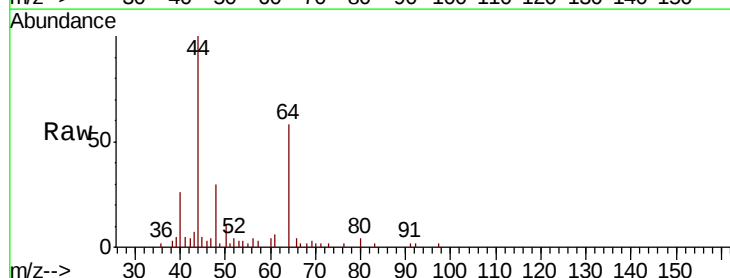
Acq: 10 Jun 2019 16:32

Tgt Ion: 50 Resp: 611

Ion Ratio Lower Upper

50 100

52 38.7 26.0 39.0



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

400

300

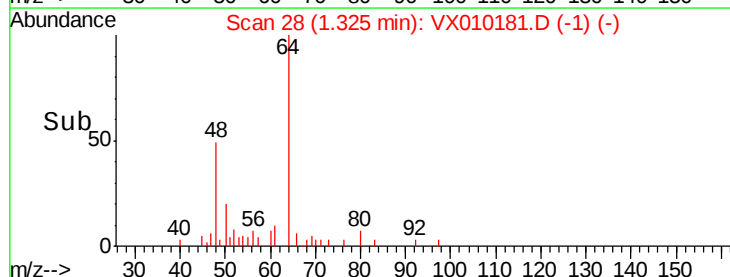
200

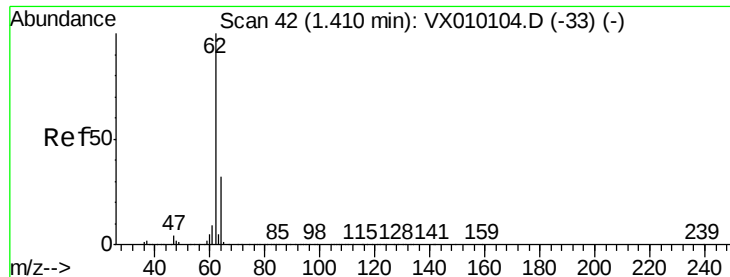
100

0

Time-->

1.30 1.35 1.40





#4

Vinyl Chloride

Concen: 0.265 ug/l

RT: 1.28 min Scan# 20

Delta R.T. -0.13 min

Lab File: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

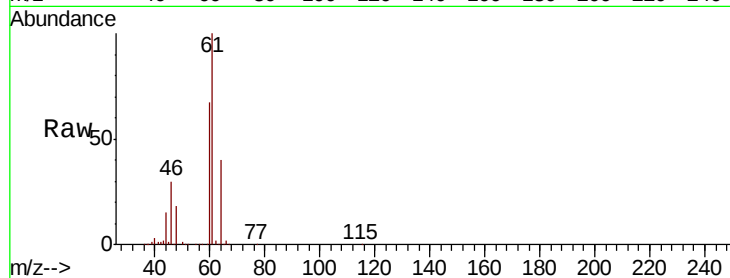
RE131D1-20190606DL

Tot Ion: 62 Resp: 581

Ion Ratio Lower Upper

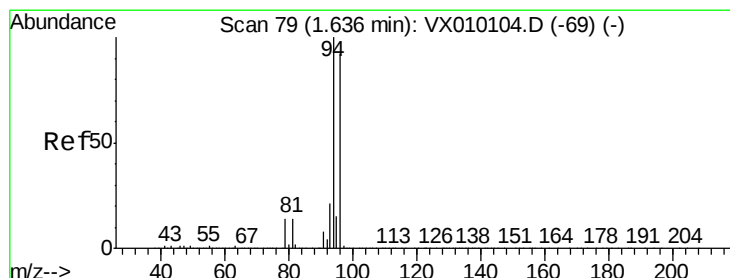
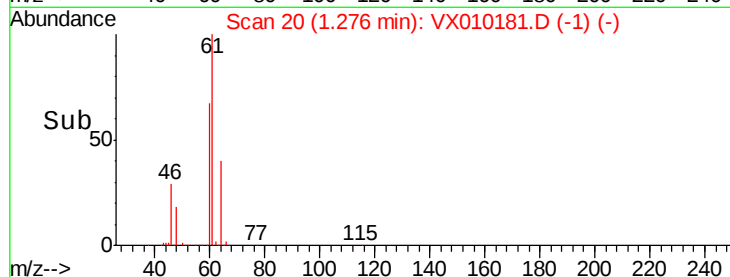
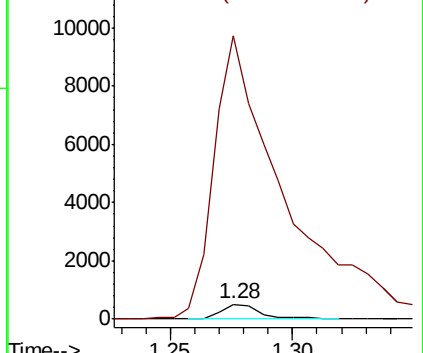
62 100

64 1792.1 25.7 38.5#



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0



#5

Bromomethane

Concen: 0.282 ug/l

RT: 1.64 min Scan# 79

Delta R.T. 0.00 min

Lab File: VX010181.D

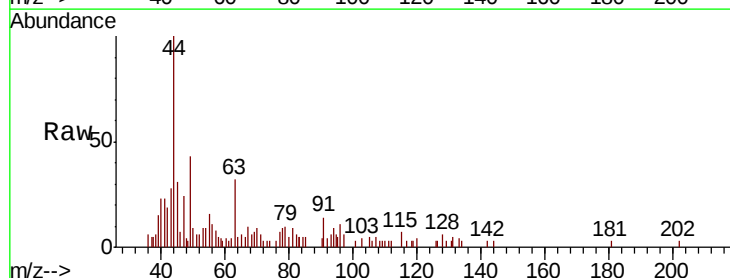
Acq: 10 Jun 2019 16:32

Tgt Ion: 94 Resp: 234

Ion Ratio Lower Upper

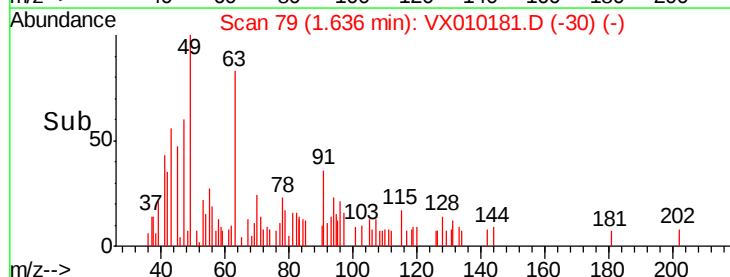
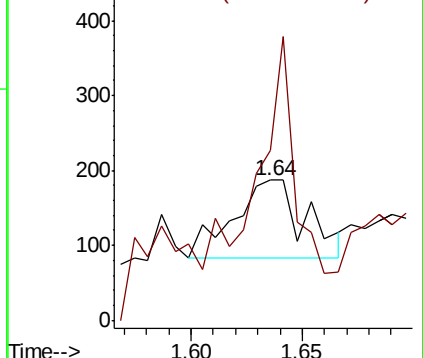
94 100

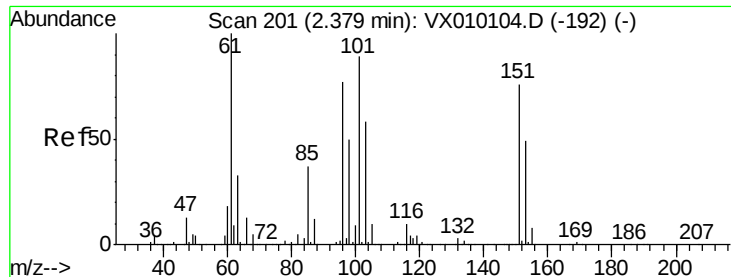
96 156.7 76.2 114.4#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.757 ug/l

RT: 2.37 min Scan# 199

Delta R.T. -0.01 min

Lab File: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

RE131D1-20190606DL

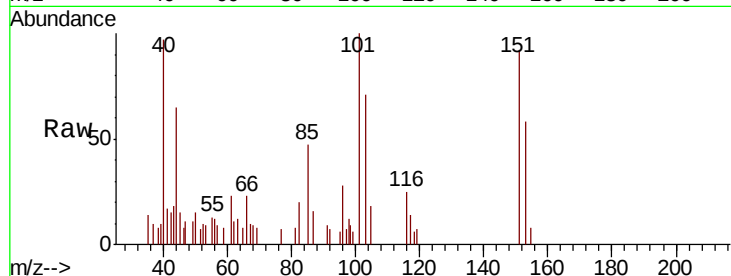
Tot Ion:101 Resp: 1702

Ion Ratio Lower Upper

101 100

85 56.5 35.2 52.8#

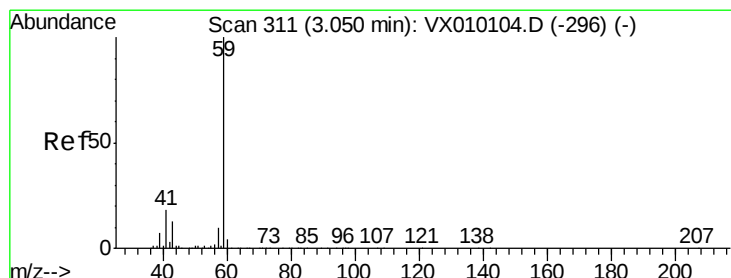
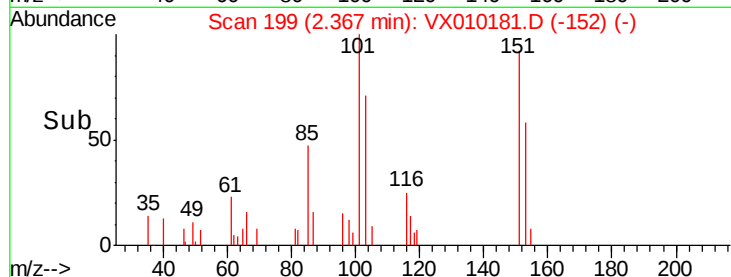
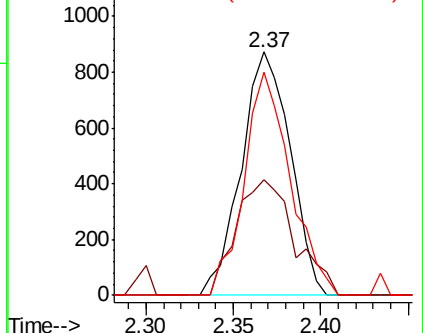
151 86.1 61.9 92.9



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VX0

Ion 150.80 (150.50 to 151.50): V



#11

Tert butyl alcohol

Concen: 10.224 ug/l

RT: 3.01 min Scan# 305

Delta R.T. -0.04 min

Lab File: VX010181.D

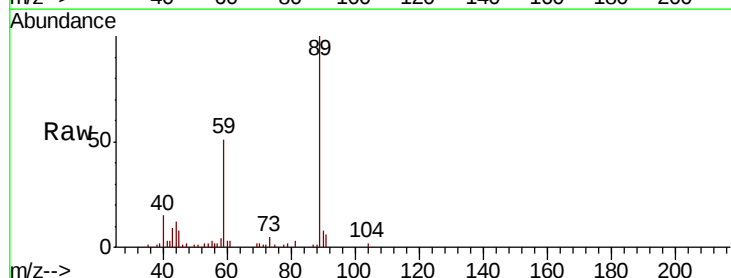
Acq: 10 Jun 2019 16:32

Tgt Ion: 59 Resp: 6250

Ion Ratio Lower Upper

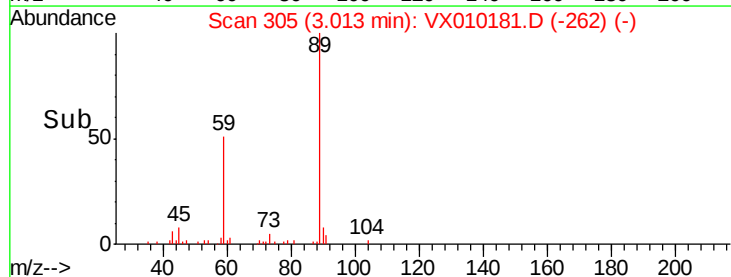
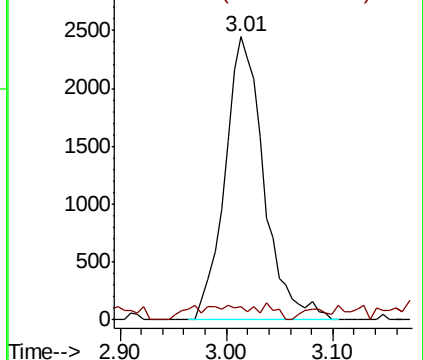
59 100

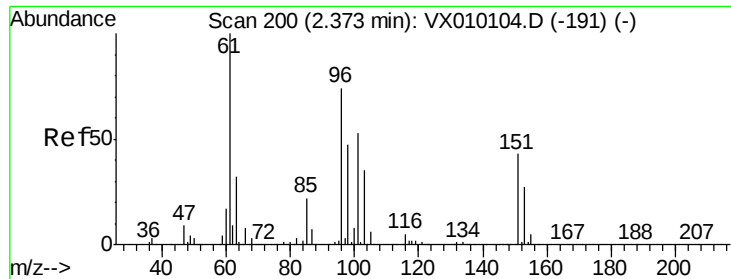
57 0.0 8.2 12.2#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#12

1,1-Dichloroethene

Concen: 0.255 ug/l

RT: 2.36 min Scan# 198

Delta R.T. -0.01 min

Lab File: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

RE131D1-20190606DL

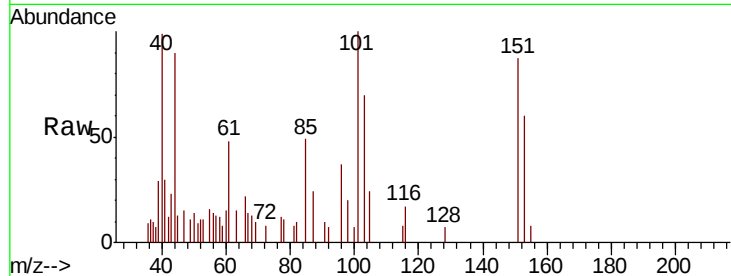
Tot Ion: 96 Resp: 585

Ion Ratio Lower Upper

96 100

61 129.7 140.7 211.1#

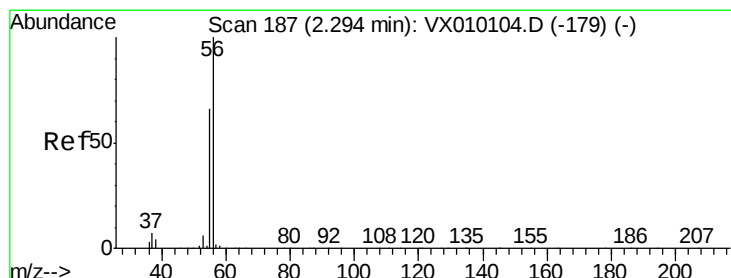
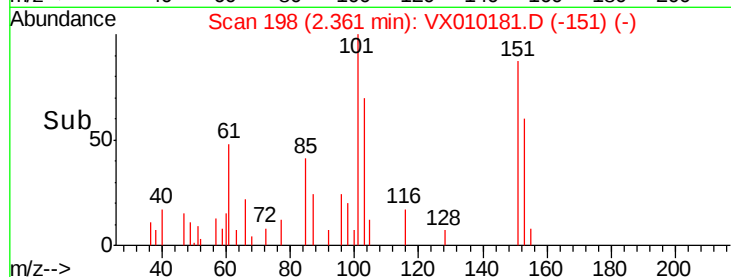
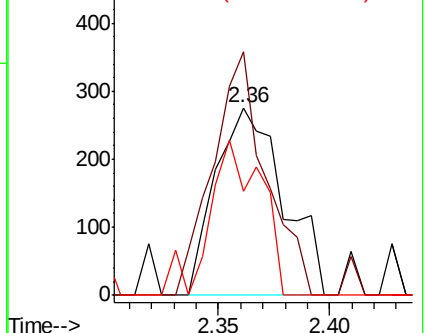
98 55.4 50.1 75.1



Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0



#13

Acrolein

Concen: 0.386 ug/l

RT: 2.28 min Scan# 184

Delta R.T. -0.02 min

Lab File: VX010181.D

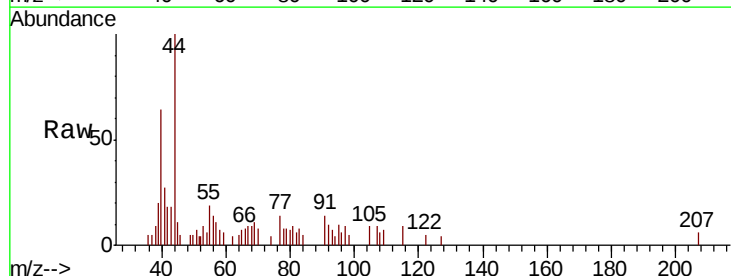
Acq: 10 Jun 2019 16:32

Tgt Ion: 56 Resp: 43

Ion Ratio Lower Upper

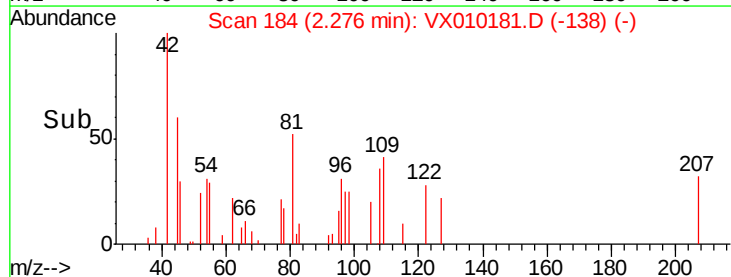
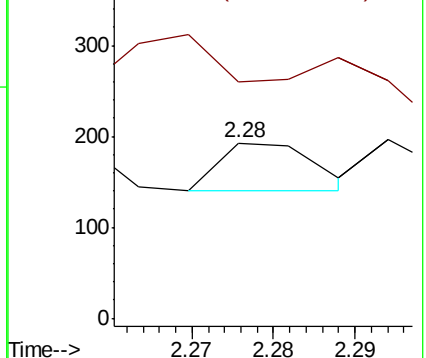
56 100

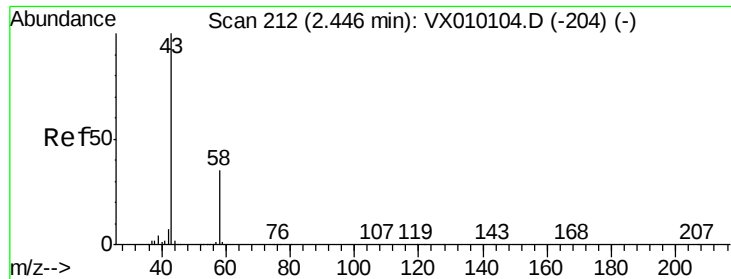
55 909.3 57.0 85.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

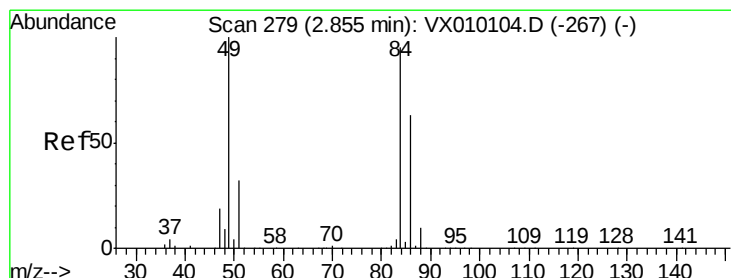
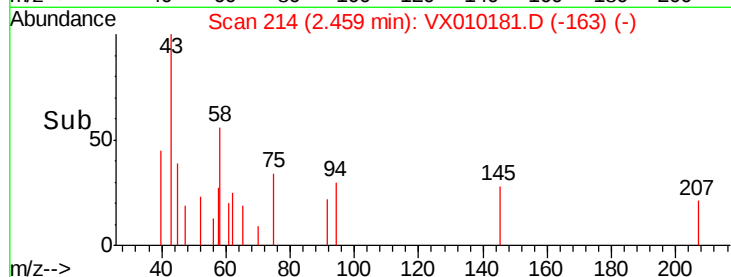
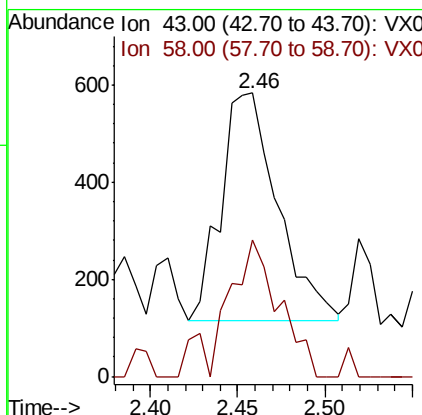
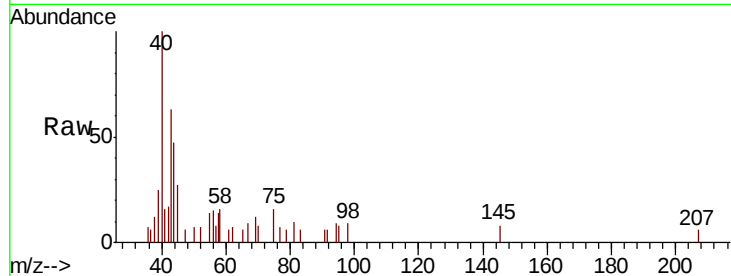




#16  
Acetone  
Concen: 0.906 ug/l  
RT: 2.46 min Scan# 214  
Delta R.T. 0.01 min  
Lab File: VX010181.D  
Acq: 10 Jun 2019 16:32

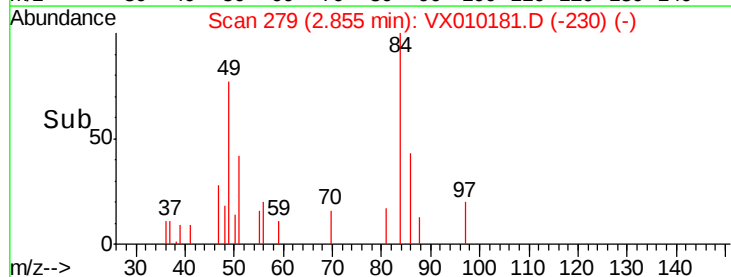
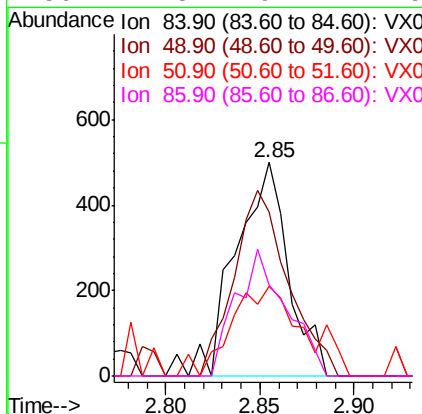
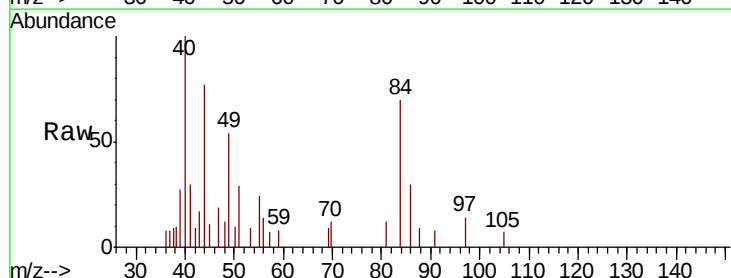
Instrument :  
MSVOA\_X  
ClientSampleId :  
RE131D1-20190606DL

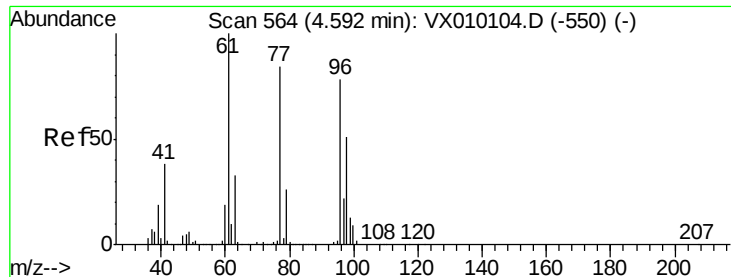
Tot Ion: 43 Resp: 1063  
Ion Ratio Lower Upper  
43 100  
58 60.1 23.2 34.8#



#20  
Methylene Chloride  
Concen: 0.372 ug/l  
RT: 2.85 min Scan# 279  
Delta R.T. 0.00 min  
Lab File: VX010181.D  
Acq: 10 Jun 2019 16:32

Tgt Ion: 84 Resp: 960  
Ion Ratio Lower Upper  
84 100  
49 76.6 115.8 173.6#  
51 31.6 34.4 51.6#  
86 42.8 49.7 74.5#



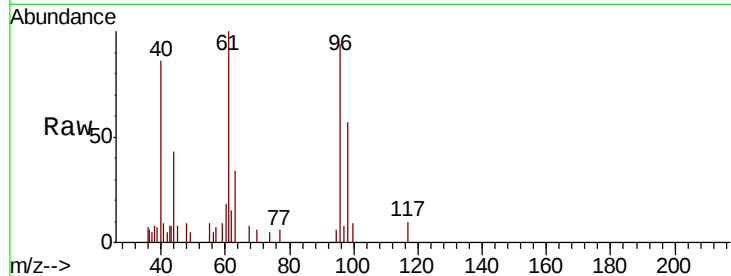


#27

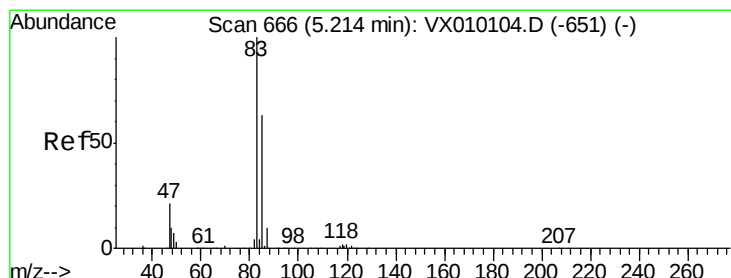
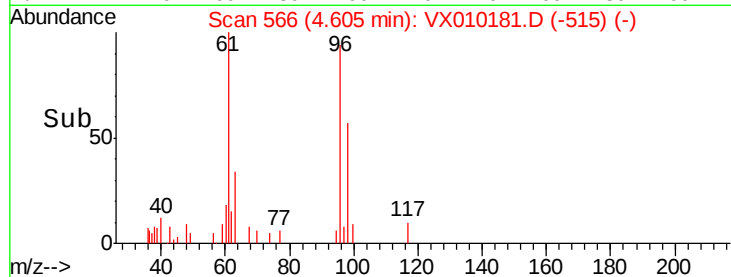
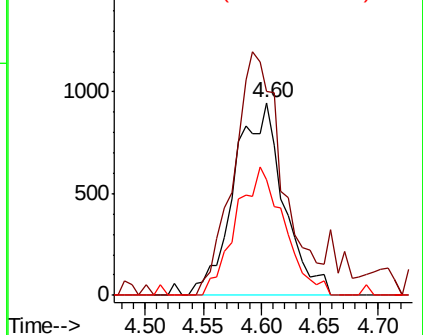
cis-1,2-Dichloroethene  
 Concen: 0.990 ug/l  
 RT: 4.60 min Scan# 566  
 Delta R.T. 0.01 min  
 Lab File: VX010181.D  
 Acq: 10 Jun 2019 16:32

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE131D1-20190606DL

Tot Ion: 96 Resp: 2798  
 Ion Ratio Lower Upper  
 96 100  
 61 125.7 0.0 334.0  
 98 65.1 0.0 131.6



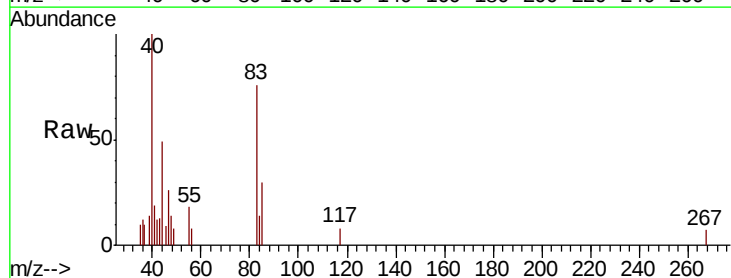
Abundance Ion 95.90 (95.60 to 96.60): VX0  
 Ion 60.90 (60.60 to 61.60): VX0  
 Ion 97.90 (97.60 to 98.60): VX0



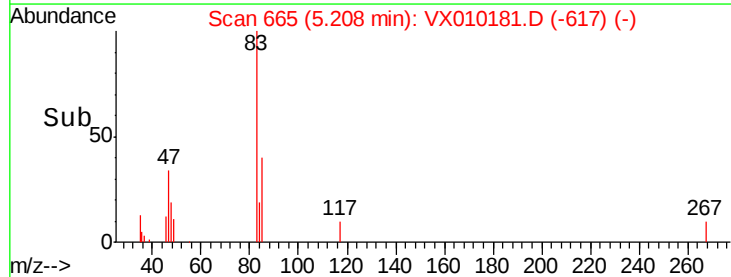
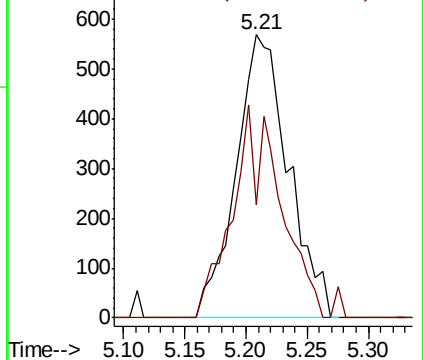
#30

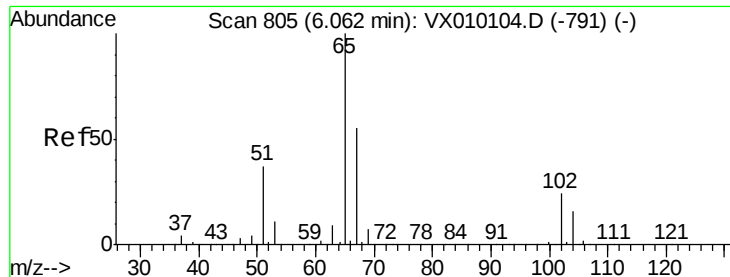
Chloroform  
 Concen: 0.406 ug/l  
 RT: 5.21 min Scan# 665  
 Delta R.T. -0.01 min  
 Lab File: VX010181.D  
 Acq: 10 Jun 2019 16:32

Tgt Ion: 83 Resp: 1695  
 Ion Ratio Lower Upper  
 83 100  
 85 39.8 52.6 78.8#



Abundance Ion 82.90 (82.60 to 83.60): VX0  
 Ion 84.90 (84.60 to 85.60): VX0

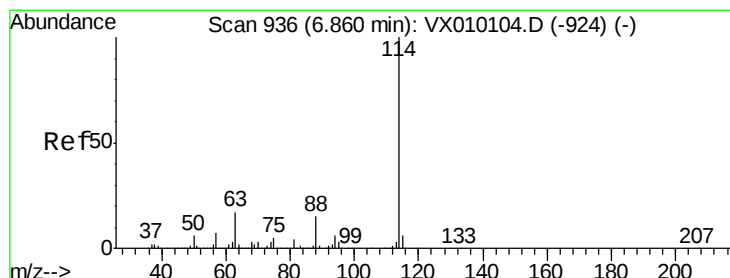
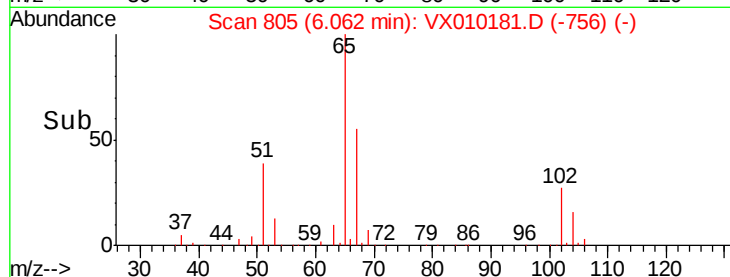
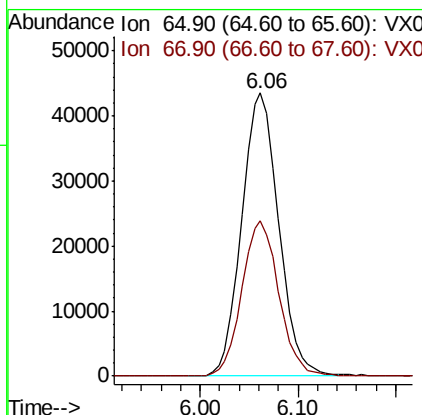
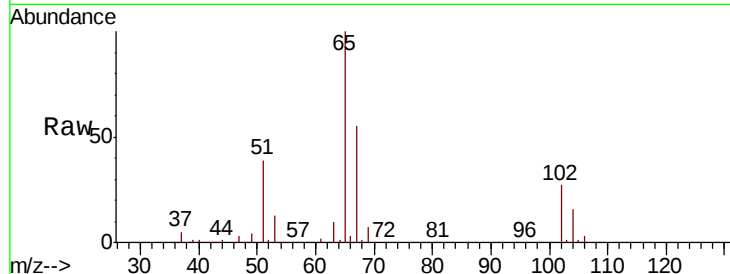




#33  
 1,2-Dichloroethane-d4  
 Concen: 45.906 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. 0.00 min  
 Lab File: VX010181.D  
 Acq: 10 Jun 2019 16:32

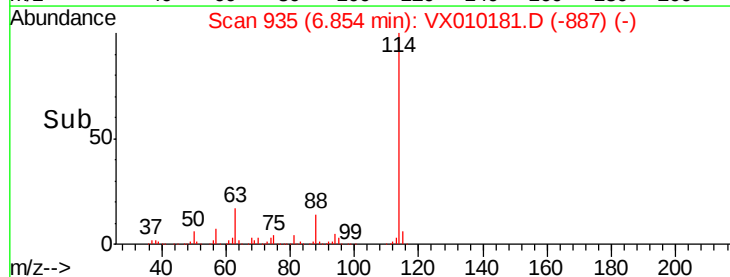
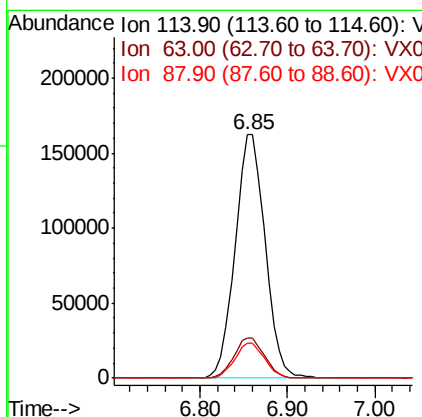
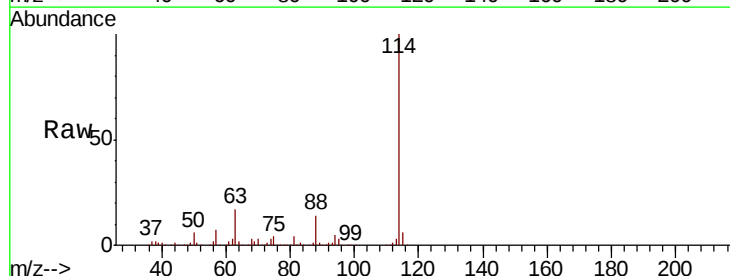
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE131D1-20190606DL

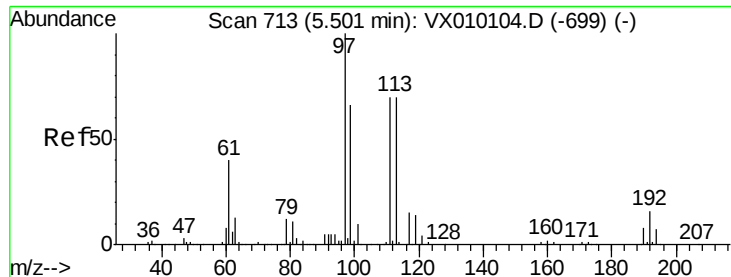
Tot Ion: 65 Resp: 114556  
 Ion Ratio Lower Upper  
 65 100  
 67 55.1 0.0 108.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 935  
 Delta R.T. -0.01 min  
 Lab File: VX010181.D  
 Acq: 10 Jun 2019 16:32

Tgt Ion: 114 Resp: 387546  
 Ion Ratio Lower Upper  
 114 100  
 63 16.5 0.0 47.4  
 88 14.5 0.0 33.0

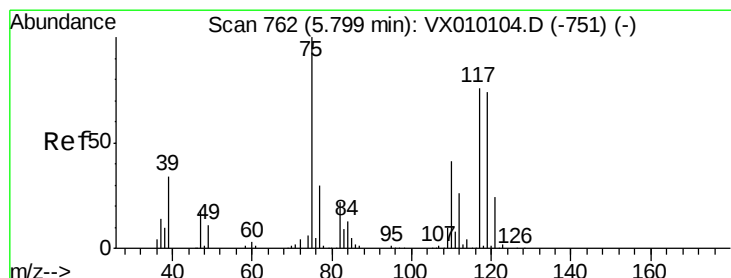
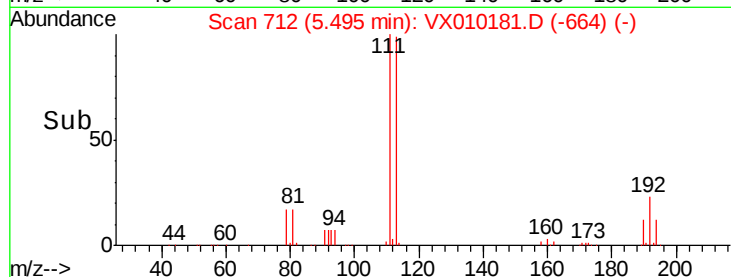
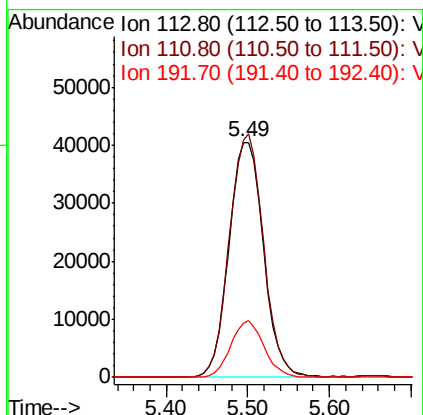
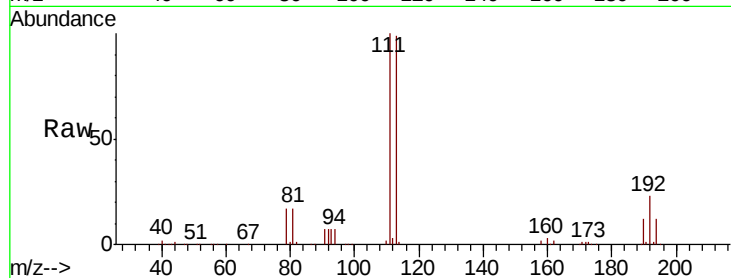




#35  
 Dibromofluoromethane  
 Concen: 49.732 ug/l  
 RT: 5.49 min Scan# 712  
 Delta R.T. -0.01 min  
 Lab File: VX010181.D  
 Acq: 10 Jun 2019 16:32

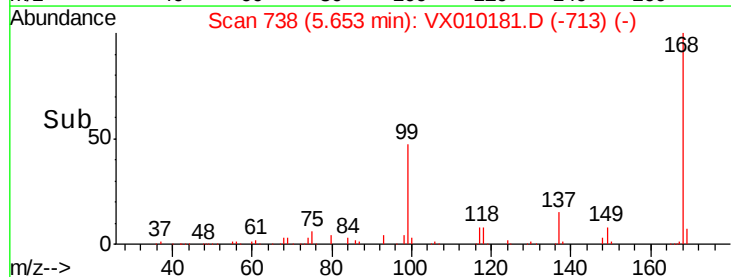
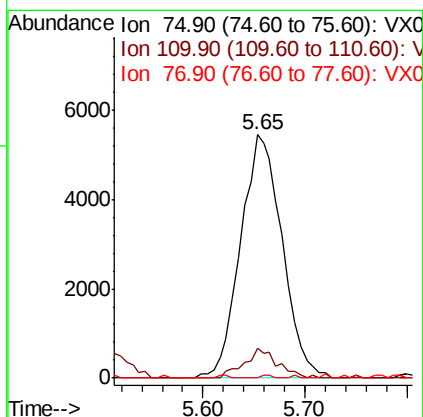
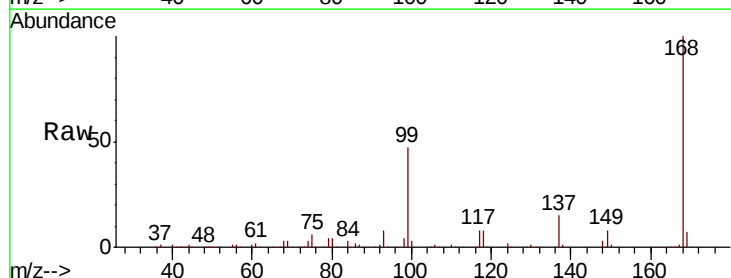
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 RE131D1-20190606DL

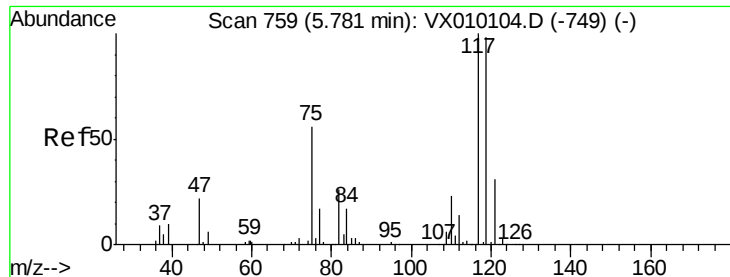
Tot Ion:113 Resp: 118884  
 Ion Ratio Lower Upper  
 113 100  
 111 101.7 82.2 123.2  
 192 23.1 17.1 25.7



#36  
 1,1-Dichloropropene  
 Concen: 4.877 ug/l  
 RT: 5.65 min Scan# 738  
 Delta R.T. -0.15 min  
 Lab File: VX010181.D  
 Acq: 10 Jun 2019 16:32

Tgt Ion: 75 Resp: 15419  
 Ion Ratio Lower Upper  
 75 100  
 110 9.8 16.7 50.1#  
 77 0.3 25.0 37.4#

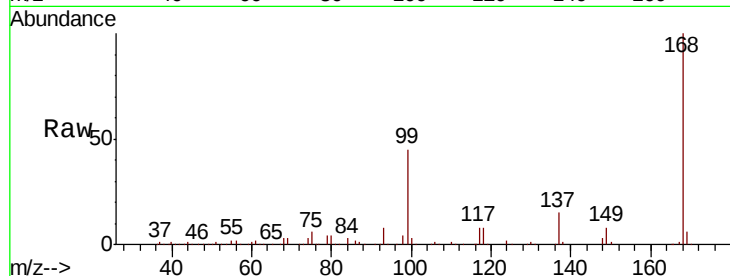




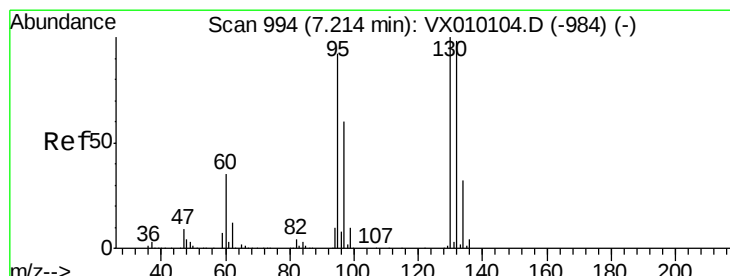
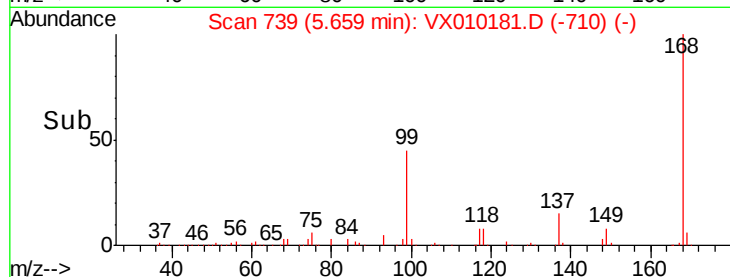
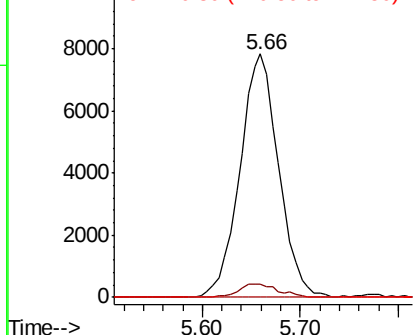
#38  
Carbon Tetrachloride  
Concen: 5.990 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.12 min  
Lab File: VX010181.D  
Acq: 10 Jun 2019 16:32

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE131D1-20190606DL

Tot Ion:117 Resp: 21438  
Ion Ratio Lower Upper  
117 100  
119 5.4 77.3 115.9#  
121 0.0 25.4 38.0#

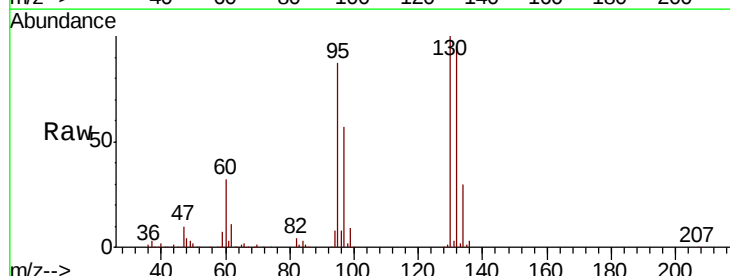


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

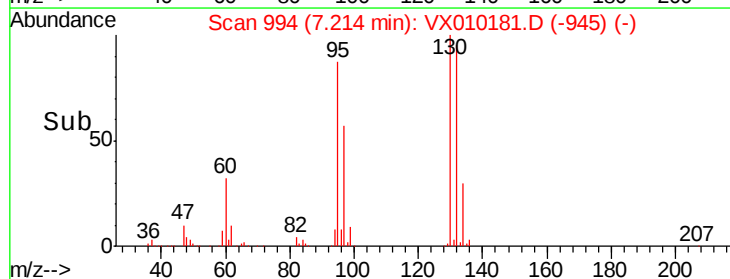
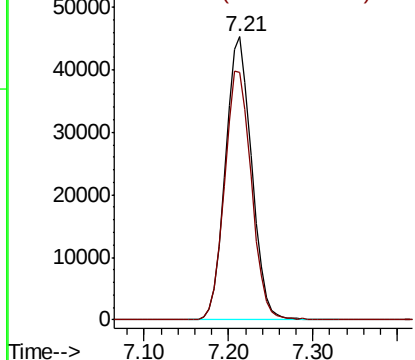


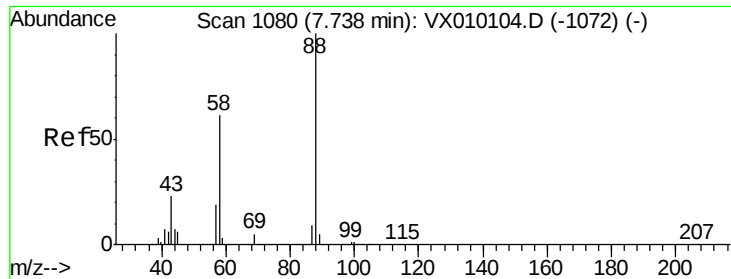
#44  
Trichloroethene  
Concen: 32.376 ug/l  
RT: 7.21 min Scan# 994  
Delta R.T. 0.00 min  
Lab File: VX010181.D  
Acq: 10 Jun 2019 16:32

Tgt Ion:130 Resp: 95414  
Ion Ratio Lower Upper  
130 100  
95 87.5 0.0 207.4



Abundance Ion 129.80 (129.50 to 130.50): V  
Ion 94.90 (94.60 to 95.60): VX0





#49

1,4-Dioxane

Concen: 5.263 ug/l

RT: 7.76 min Scan# 1083

Delta R.T. 0.02 min

Lab File: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

RE131D1-20190606DL

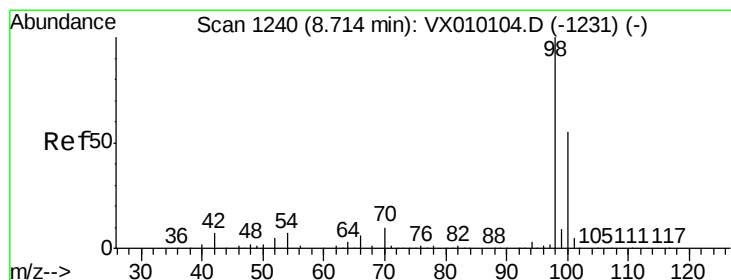
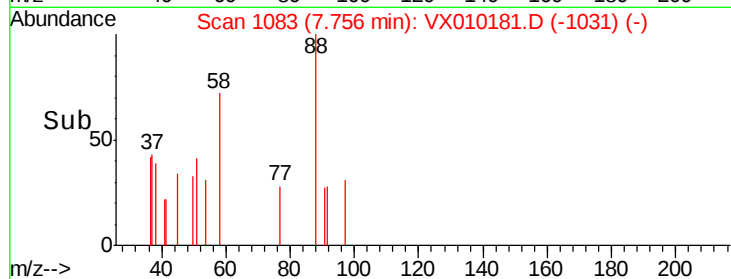
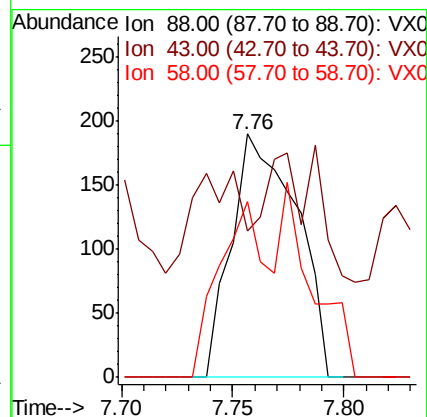
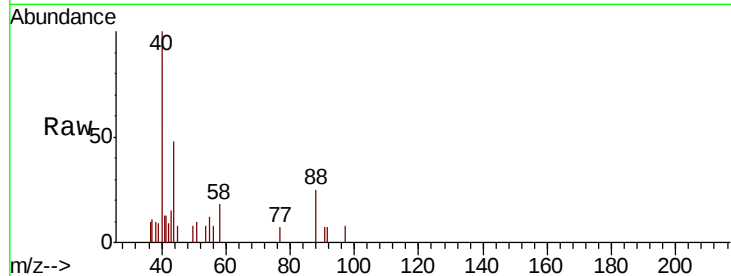
Tot Ion: 88 Resp: 386

Ion Ratio Lower Upper

88 100

43 35.0 30.2 45.4

58 53.6 64.0 96.0#



#50

Toluene-d8

Concen: 51.062 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX010181.D

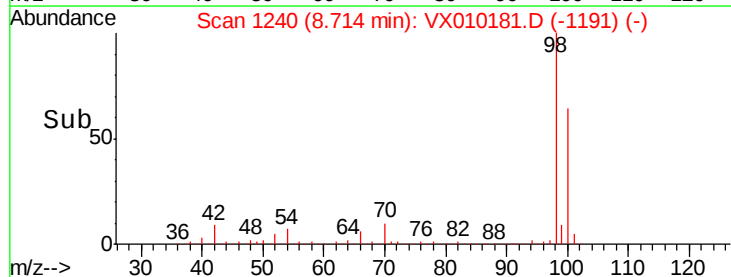
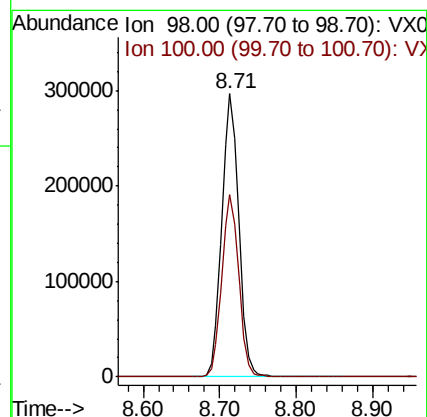
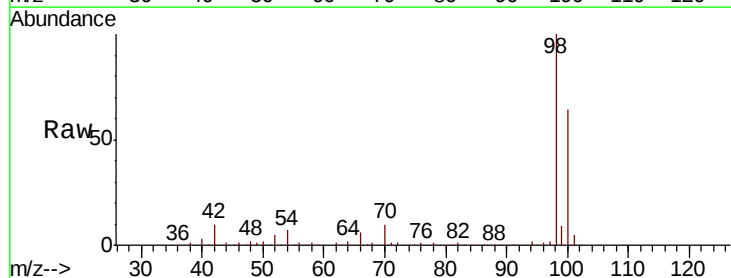
Acq: 10 Jun 2019 16:32

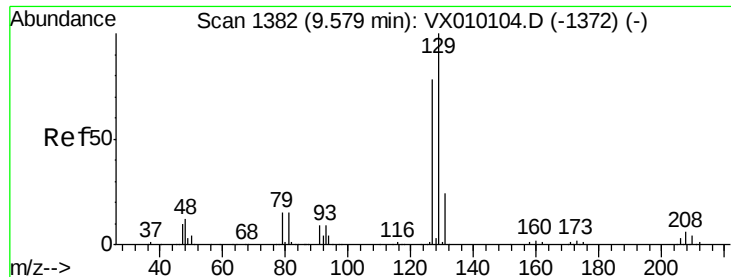
Tgt Ion: 98 Resp: 457473

Ion Ratio Lower Upper

98 100

100 64.3 51.5 77.3





#60

Dibromochloromethane

Concen: 2.036 ug/l

RT: 9.34 min Scan# 1342

Delta R.T. -0.24 min

Lab File: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

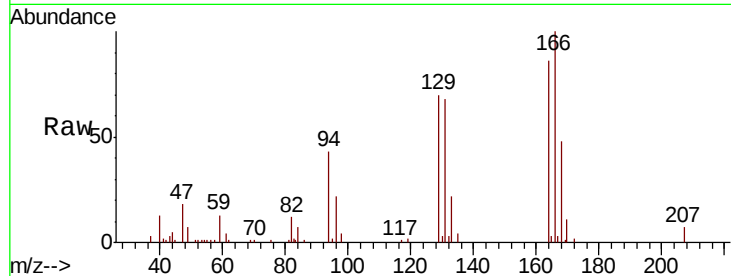
RE131D1-20190606DL

Tot Ion:129 Resp: 6340

Ion Ratio Lower Upper

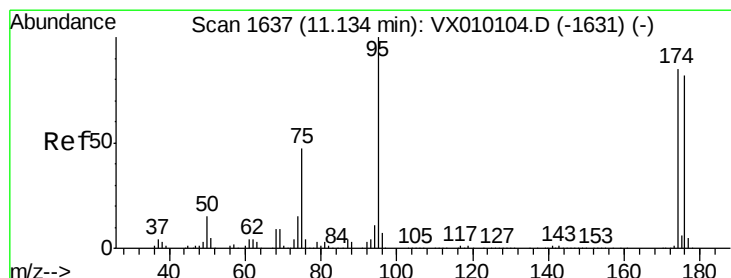
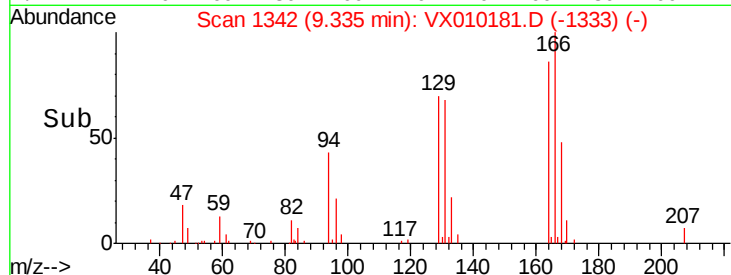
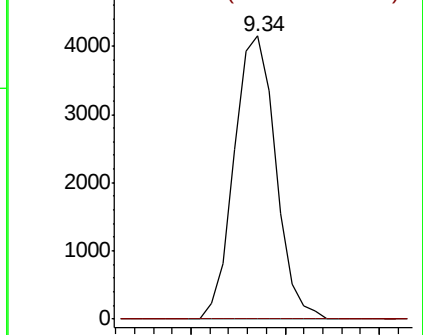
129 100

127 0.0 38.5 115.5#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 48.054 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX010181.D

Acq: 10 Jun 2019 16:32

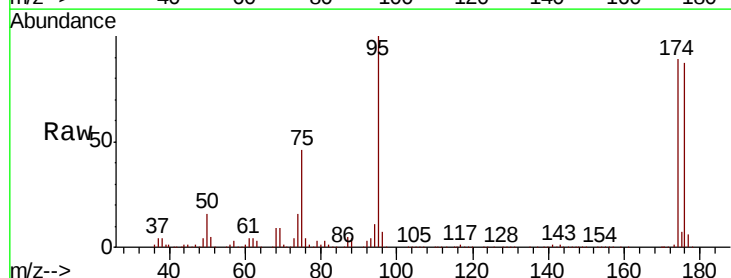
Tgt Ion: 95 Resp: 160783

Ion Ratio Lower Upper

95 100

174 92.8 0.0 160.4

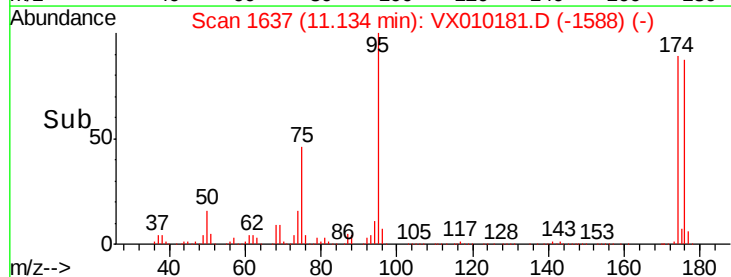
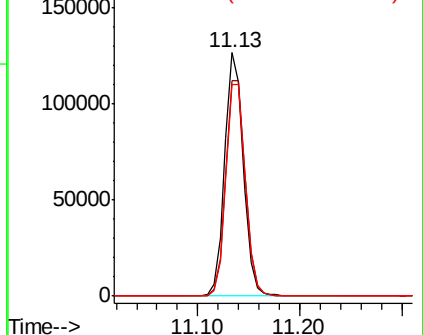
176 90.8 0.0 154.6

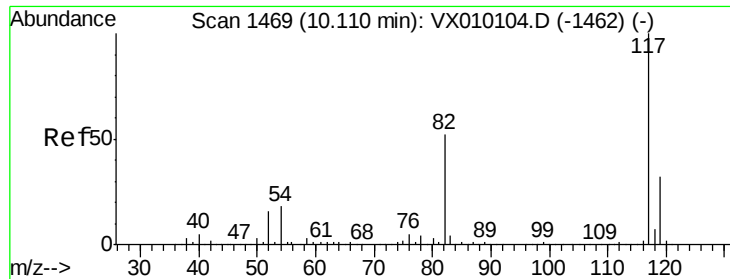


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

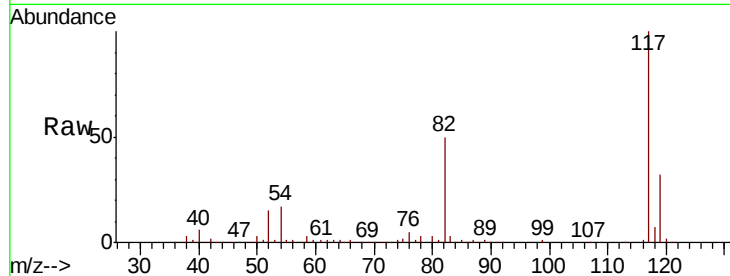




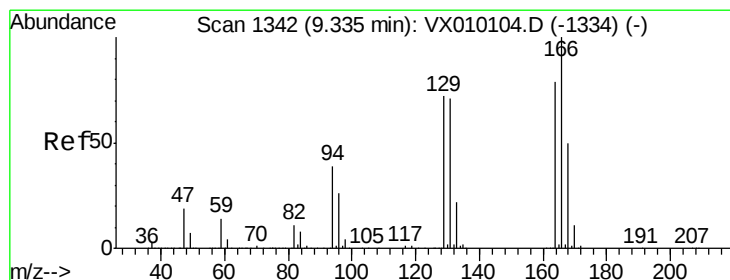
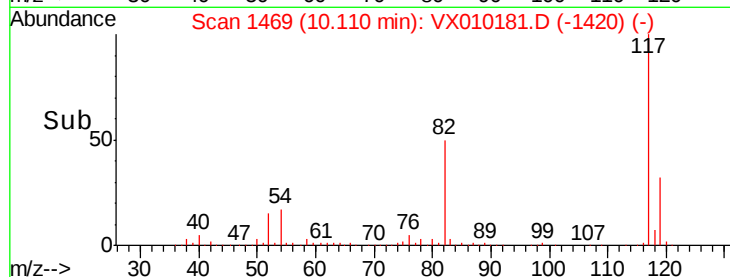
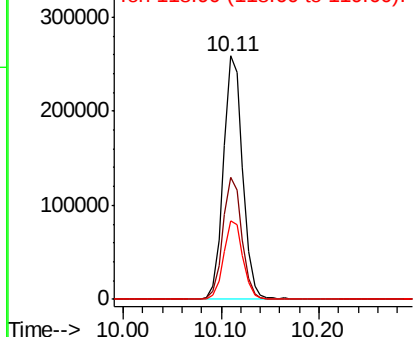
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. 0.00 min  
Lab File: VX010181.D  
Acq: 10 Jun 2019 16:32

Instrument :  
MSVOA\_X  
ClientSampleId :  
RE131D1-20190606DL

Tot Ion:117 Resp: 351513  
Ion Ratio Lower Upper  
117 100  
82 49.9 49.2 73.8  
119 32.0 25.2 37.8

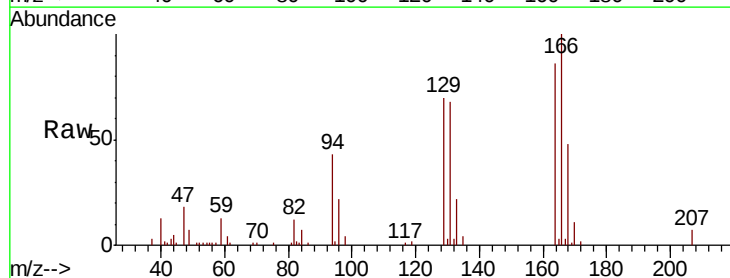


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

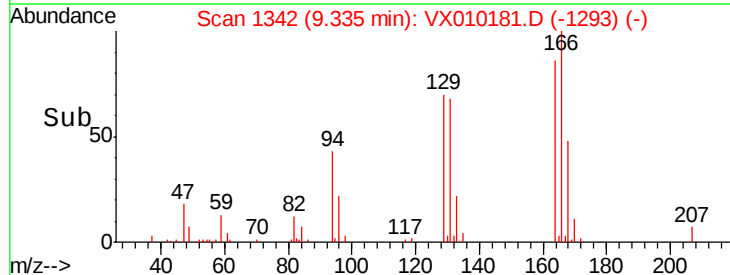
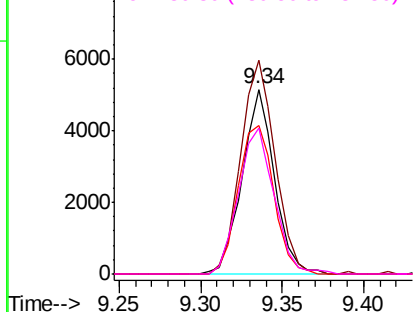


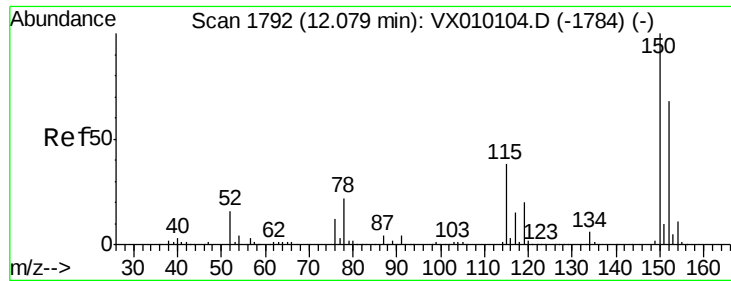
#64  
Tetrachloroethene  
Concen: 2.729 ug/l  
RT: 9.34 min Scan# 1342  
Delta R.T. 0.00 min  
Lab File: VX010181.D  
Acq: 10 Jun 2019 16:32

Tgt Ion:164 Resp: 7126  
Ion Ratio Lower Upper  
164 100  
166 115.8 105.0 157.4  
129 80.5 75.1 112.7  
131 79.1 72.2 108.4



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: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

RE131D1-20190606DL

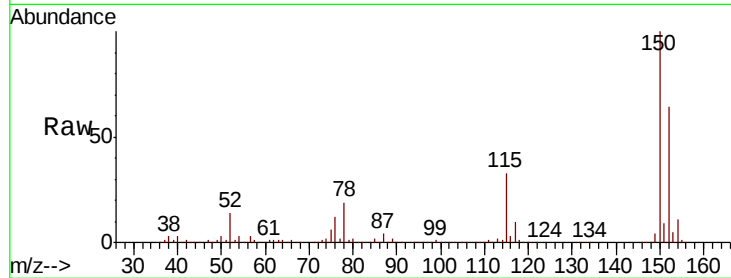
Tot Ion:152 Resp: 168648

Ion Ratio Lower Upper

152 100

115 53.6 41.4 124.2

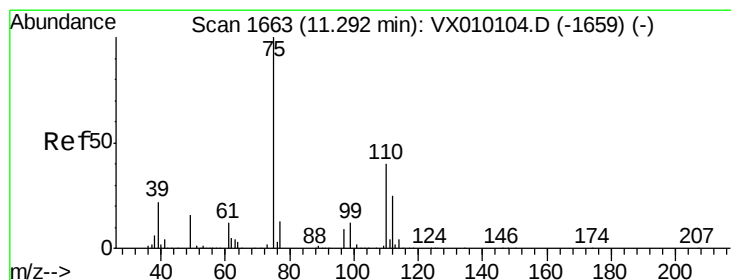
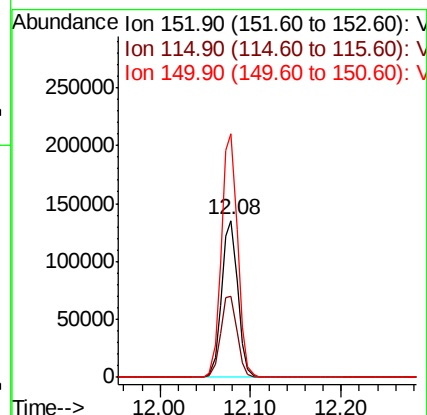
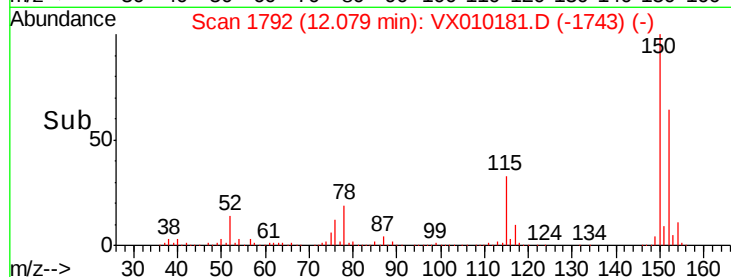
150 156.6 0.0 345.2



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: 21.581 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX010181.D

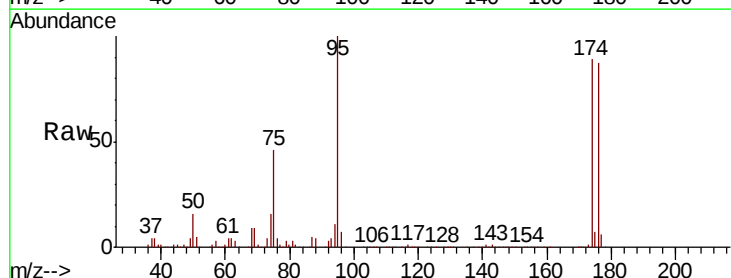
Acq: 10 Jun 2019 16:32

Tgt Ion: 75 Resp: 72799

Ion Ratio Lower Upper

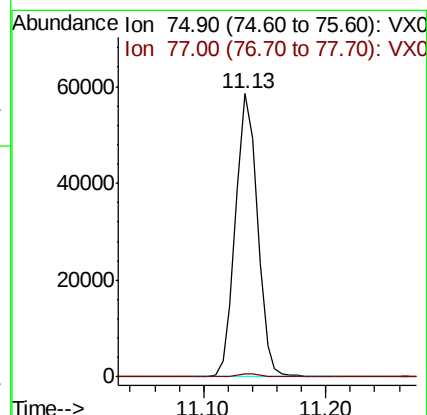
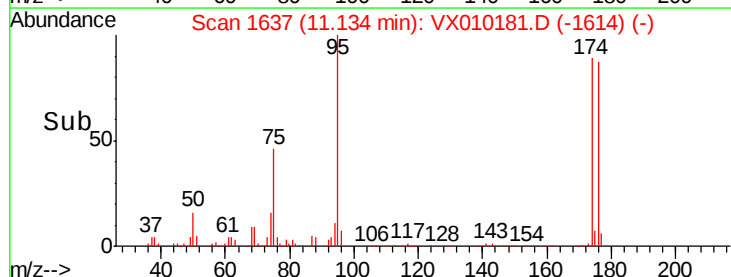
75 100

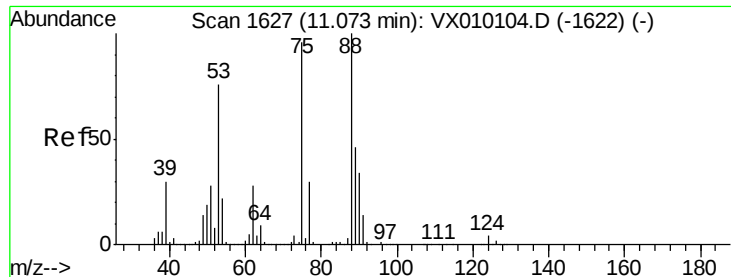
77 1.4 22.1 66.1#



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: 47.682 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX010181.D

Acq: 10 Jun 2019 16:32

Instrument :

MSVOA\_X

ClientSampleId :

RE131D1-20190606DL

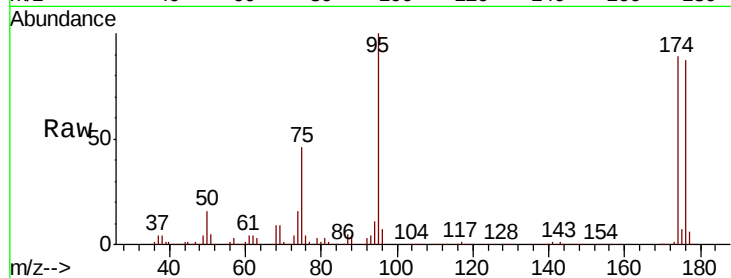
Tot Ion: 75 Resp: 72799

Ion Ratio Lower Upper

75 100

53 0.0 79.8 119.6#

89 0.0 34.2 51.4#



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

