

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX070219\  
 Data File : VX010621.D  
 Acq On : 02 Jul 2019 16:47  
 Operator : JC/SP  
 Sample : K3636-02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SP19-JMW0961

Quant Time: Jul 03 01:57:14 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jun 20 03:31:56 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 243555   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 372033   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 342663   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 158818   | 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   | 118127   | 51.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.46% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 114671   | 50.38 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.76% |          |
| 50) Toluene-d8              | 8.71  | 98   | 441951   | 50.75 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.50% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 149838   | 47.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.32%  |          |

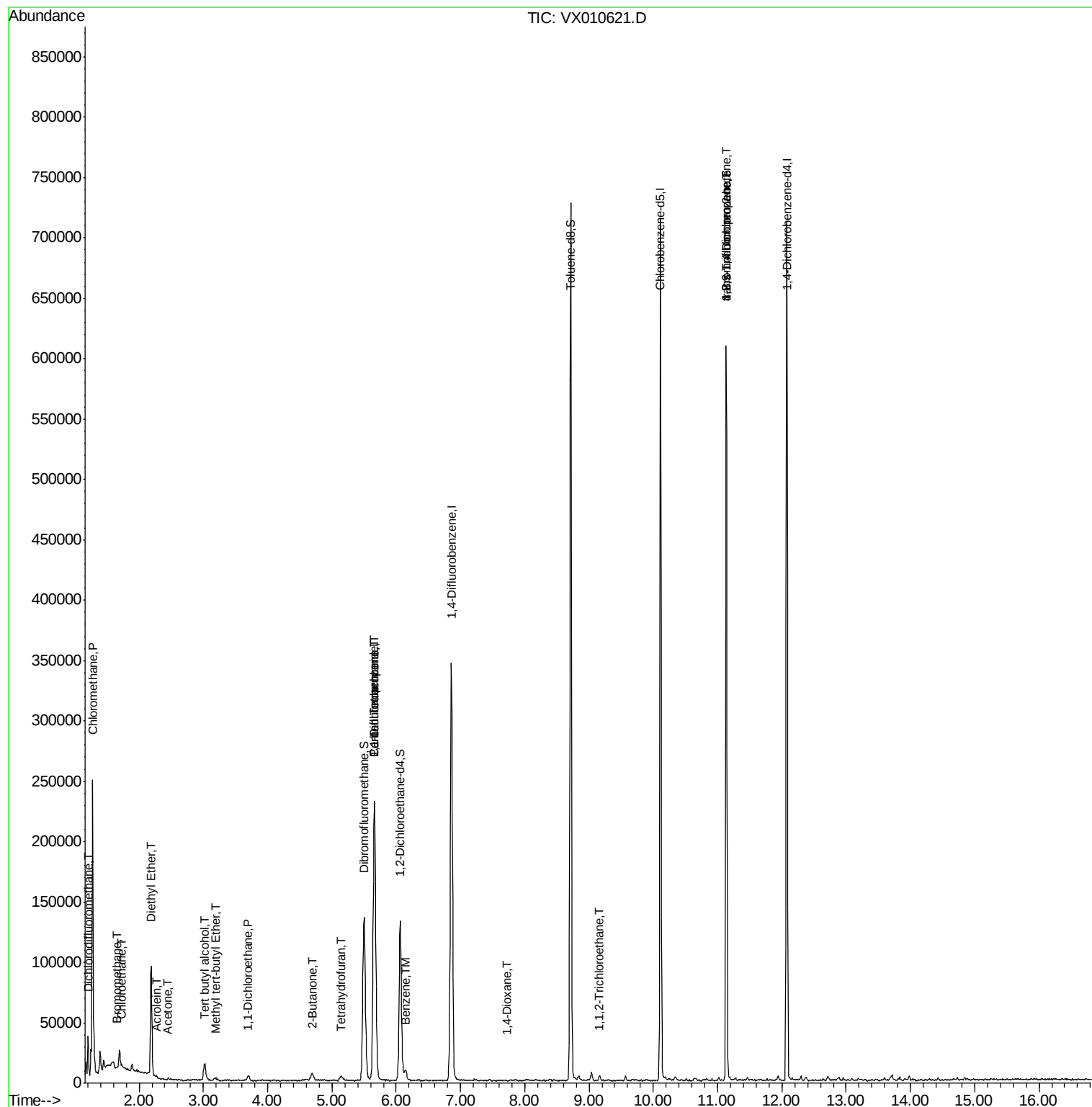
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.21  | 85   | 906      | 0.535  | ug/l   | 98     |
| 3) Chloromethane               | 1.28  | 50   | 4304     | 2.183  | ug/l # | 46     |
| 5) Bromomethane                | 1.65  | 94   | 293      | 0.278  | ug/l   | 100    |
| 6) Chloroethane                | 1.73  | 64   | 1464     | 1.149  | ug/l # | 63     |
| 8) Diethyl Ether               | 2.19  | 74   | 29879    | 24.337 | ug/l   | 98     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 9158     | 15.326 | ug/l # | 86     |
| 13) Acrolein                   | 2.28  | 56   | 127      | 0.320  | ug/l # | 1      |
| 16) Acetone                    | 2.44  | 43   | 824      | 0.720  | ug/l # | 62     |
| 19) Methyl tert-butyl Ether    | 3.20  | 73   | 1657     | 0.250  | ug/l # | 88     |
| 24) 1,1-Dichloroethane         | 3.70  | 63   | 4153     | 1.147  | ug/l   | 96     |
| 25) 2-Butanone                 | 4.68  | 43   | 341      | 0.203  | ug/l # | 46     |
| 29) Tetrahydrofuran            | 5.13  | 42   | 3386     | 3.256  | ug/l # | 89     |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 15393    | 5.207  | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 21087    | 6.587  | ug/l # | 16     |
| 40) Benzene                    | 6.14  | 78   | 10081    | 1.095  | ug/l # | 87     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 19       | 0.282  | ug/l # | 1      |
| 55) 1,1,2-Trichloroethane      | 9.16  | 97   | 1471     | 0.588  | ug/l # | 19     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 72113    | 24.917 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 72113    | 58.130 | ug/l # | 16     |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX070219\  
Data File : VX010621.D  
Acq On : 02 Jul 2019 16:47  
Operator : JC/SP  
Sample : K3636-02  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
SP19-JMW0961

Quant Time: Jul 03 01:57:14 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X061919W.M  
Quant Title : SW846 8260  
QLast Update : Thu Jun 20 03:31:56 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: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

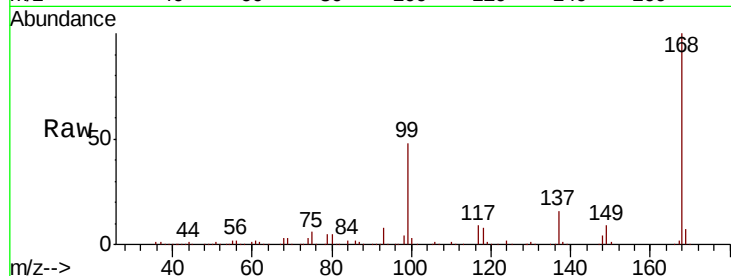
SP19-JMW0961

Tot Ion:168 Resp: 243555

Ion Ratio Lower Upper

168 100

99 47.9 35.5 53.3



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

80000

60000

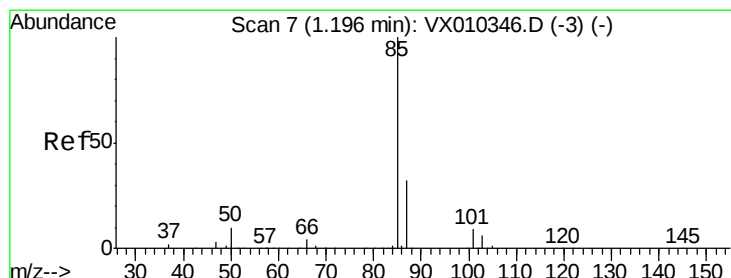
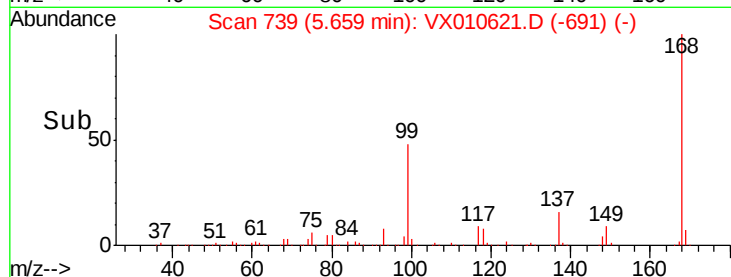
40000

20000

0

Time-->

5.50 5.60 5.70 5.80



#2

Dichlorodifluoromethane

Concen: 0.535 ug/l

RT: 1.21 min Scan# 9

Delta R.T. 0.01 min

Lab File: VX010621.D

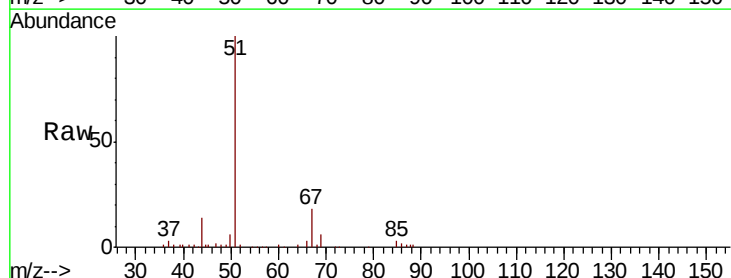
Acq: 02 Jul 2019 16:47

Tgt Ion: 85 Resp: 906

Ion Ratio Lower Upper

85 100

87 33.4 16.3 48.8



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.21

800

600

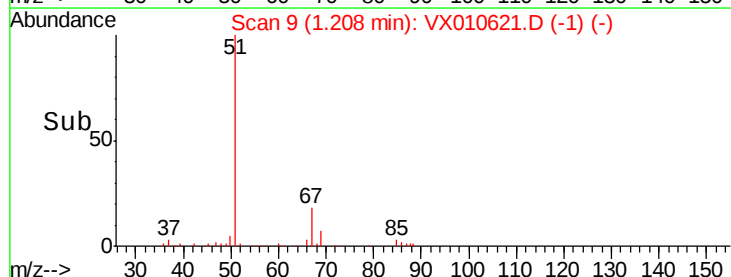
400

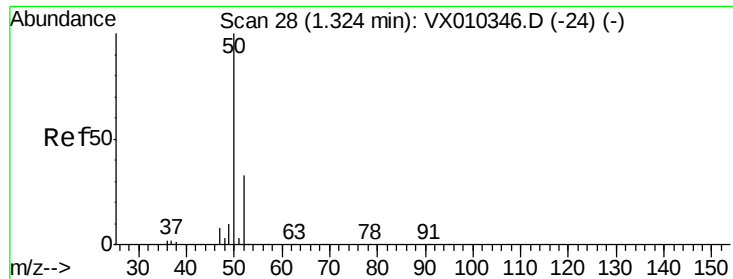
200

0

Time-->

1.20 1.25





#3

Chloromethane

Concen: 2.183 ug/l

RT: 1.28 min Scan# 20

Delta R.T. -0.05 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

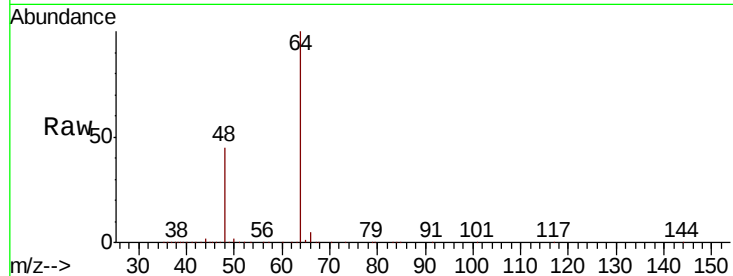
SP19-JMW0961

Tot Ion: 50 Resp: 4304

Ion Ratio Lower Upper

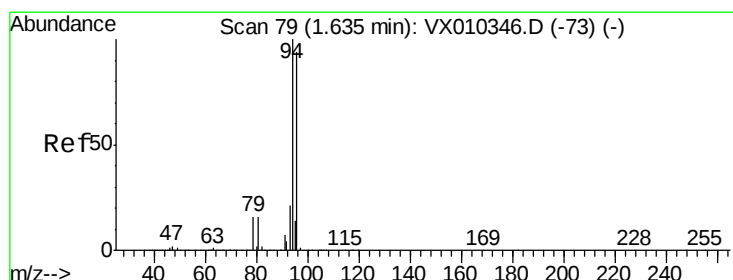
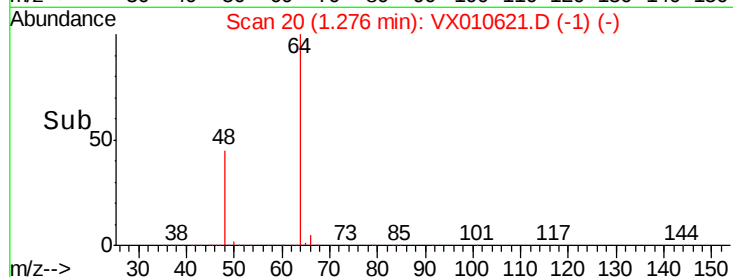
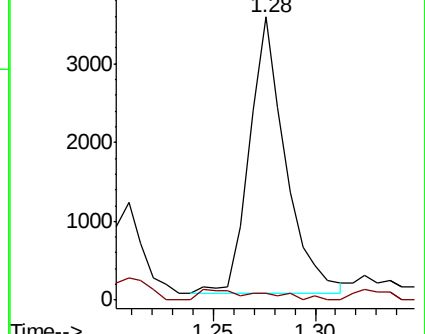
50 100

52 2.7 26.5 39.7#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0



#5

Bromomethane

Concen: 0.278 ug/l

RT: 1.65 min Scan# 82

Delta R.T. 0.02 min

Lab File: VX010621.D

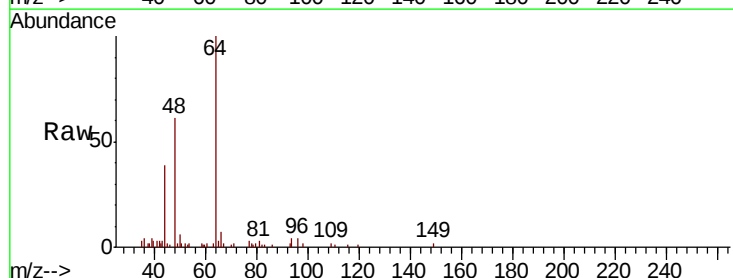
Acq: 02 Jul 2019 16:47

Tgt Ion: 94 Resp: 293

Ion Ratio Lower Upper

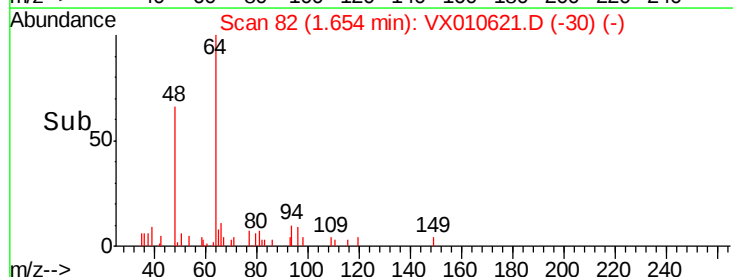
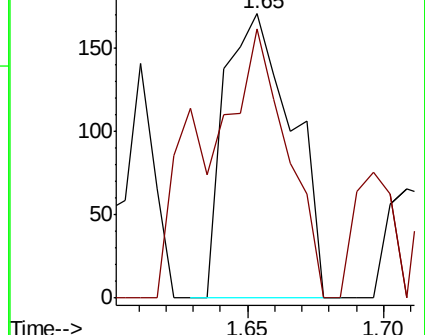
94 100

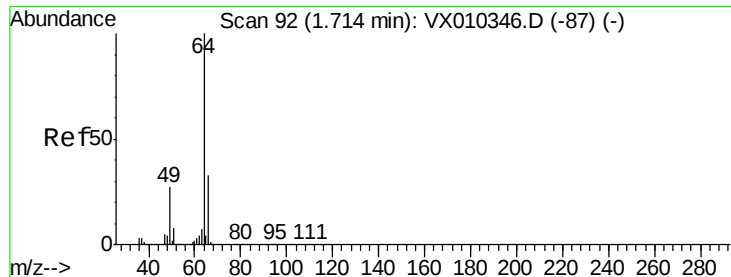
96 94.7 75.5 113.3



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: 1.149 ug/l

RT: 1.73 min Scan# 94

Delta R.T. 0.01 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

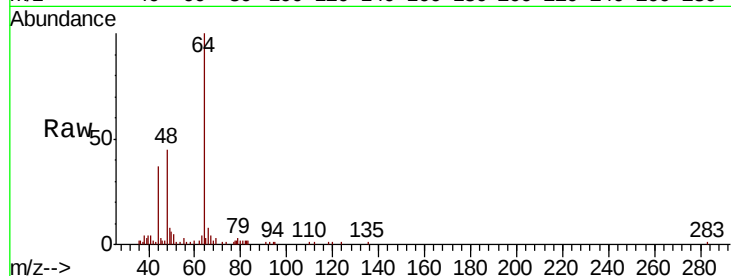
SP19-JMW0961

Tot Ion: 64 Resp: 1464

Ion Ratio Lower Upper

64 100

66 12.2 26.6 40.0#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1.73

6000

5000

4000

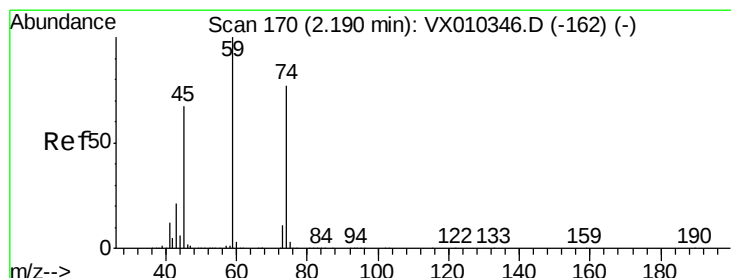
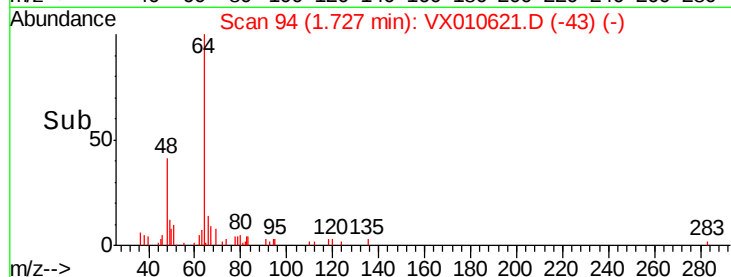
3000

2000

1000

0

Time-->



#8

Diethyl Ether

Concen: 24.337 ug/l

RT: 2.19 min Scan# 170

Delta R.T. 0.00 min

Lab File: VX010621.D

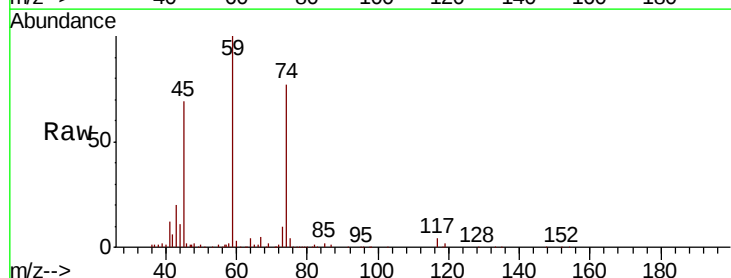
Acq: 02 Jul 2019 16:47

Tgt Ion: 74 Resp: 29879

Ion Ratio Lower Upper

74 100

45 91.5 44.8 134.4



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

25000

20000

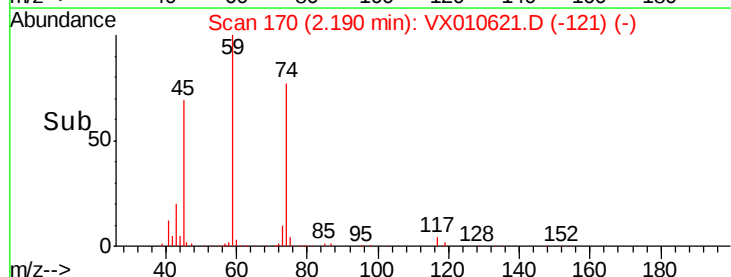
15000

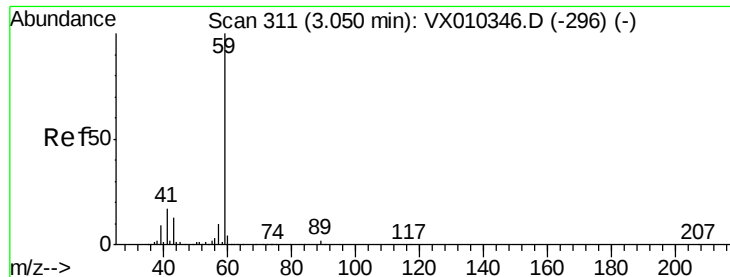
10000

5000

0

Time-->

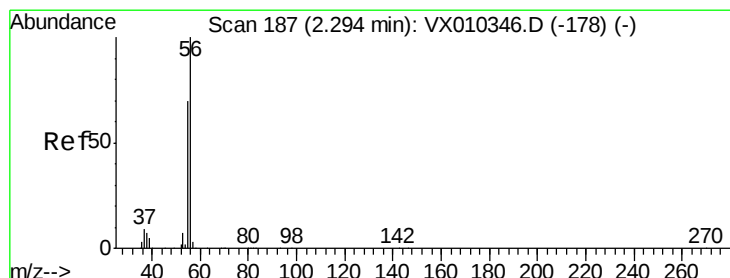
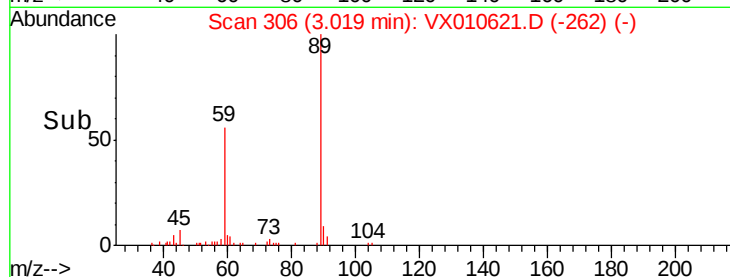
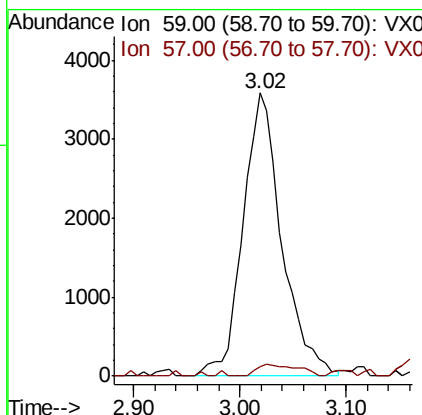
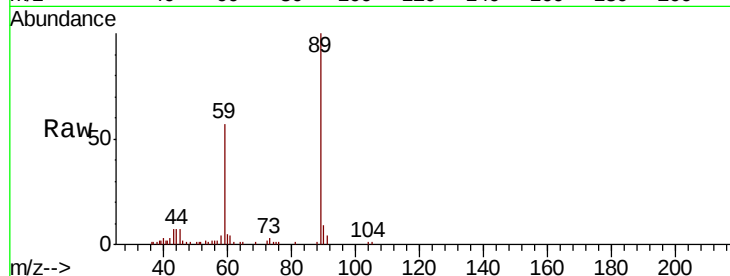




#11  
Tert butyl alcohol  
Concen: 15.326 ug/l  
RT: 3.02 min Scan# 306  
Delta R.T. -0.03 min  
Lab File: VX010621.D  
Acq: 02 Jul 2019 16:47

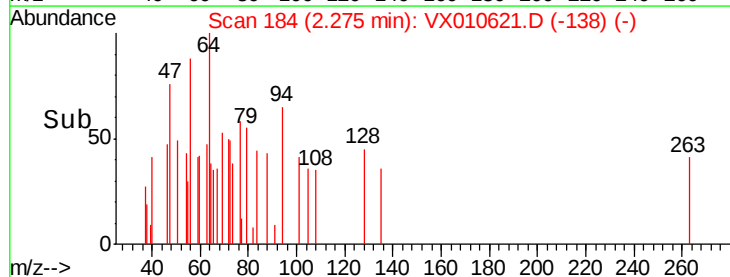
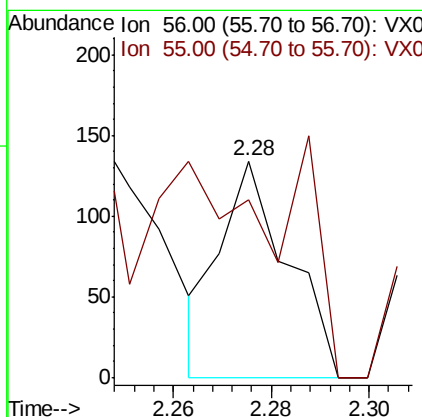
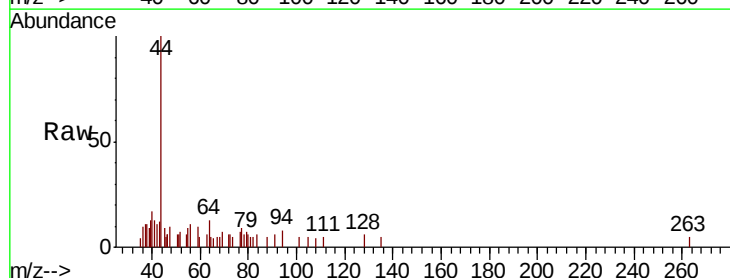
Instrument :  
MSVOA\_X  
ClientSampleId :  
SP19-JMW0961

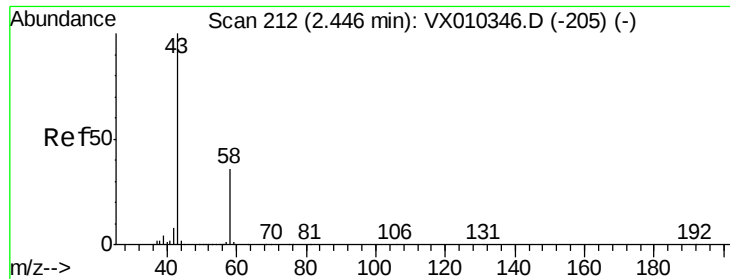
Tot Ion: 59 Resp: 9158  
Ion Ratio Lower Upper  
59 100  
57 4.3 7.7 11.5#



#13  
Acrolein  
Concen: 0.320 ug/l  
RT: 2.28 min Scan# 184  
Delta R.T. -0.02 min  
Lab File: VX010621.D  
Acq: 02 Jul 2019 16:47

Tgt Ion: 56 Resp: 127  
Ion Ratio Lower Upper  
56 100  
55 162.2 56.9 85.3#





#16

Acetone

Concen: 0.720 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

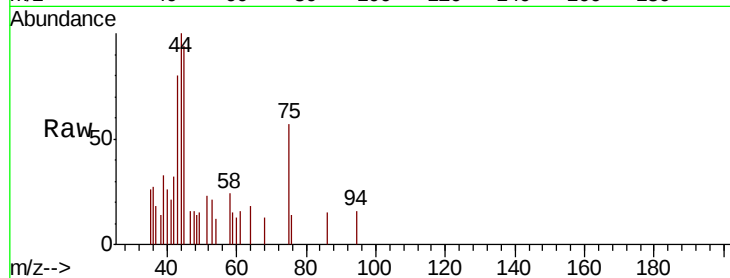
SP19-JMW0961

Tot Ion: 43 Resp: 824

Ion Ratio Lower Upper

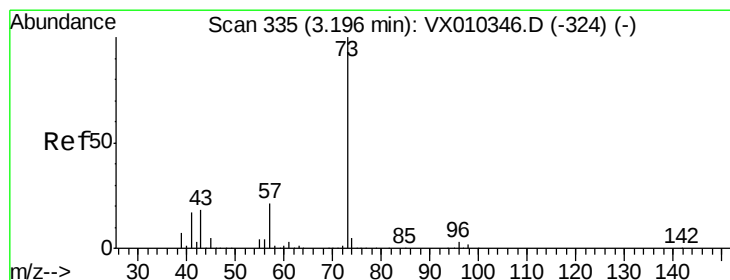
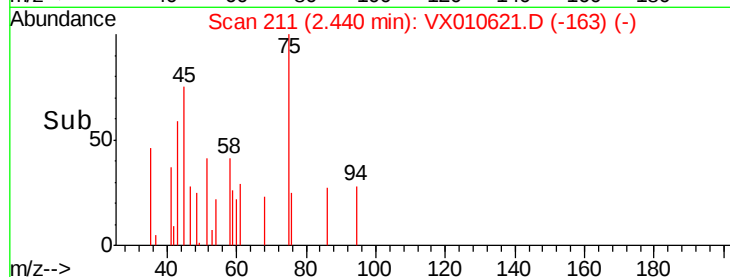
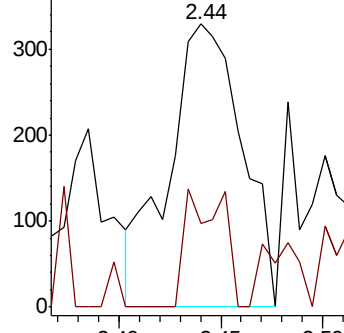
43 100

58 14.0 28.9 43.3#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#19

Methyl tert-butyl Ether

Concen: 0.250 ug/l

RT: 3.20 min Scan# 335

Delta R.T. 0.00 min

Lab File: VX010621.D

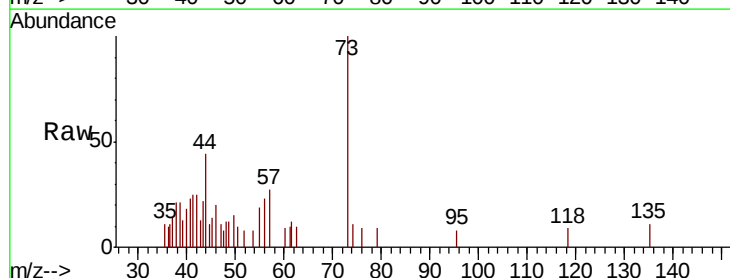
Acq: 02 Jul 2019 16:47

Tgt Ion: 73 Resp: 1657

Ion Ratio Lower Upper

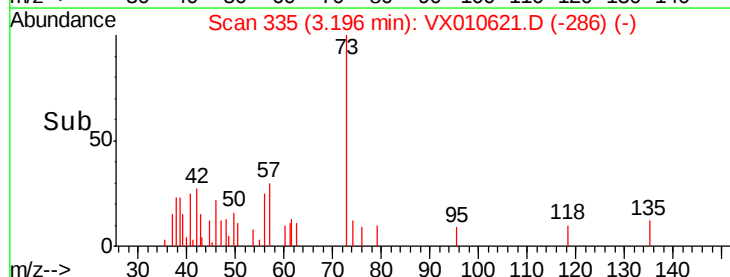
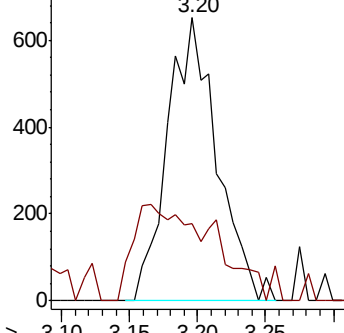
73 100

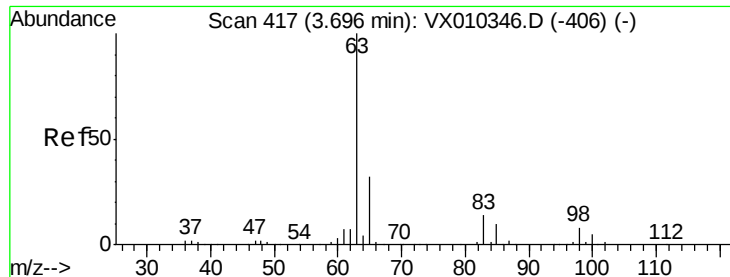
57 14.9 16.4 24.6#



Abundance Ion 73.00 (72.70 to 73.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#24

1,1-Dichloroethane

Concen: 1.147 ug/l

RT: 3.70 min Scan# 417

Delta R.T. 0.00 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

SP19-JMW0961

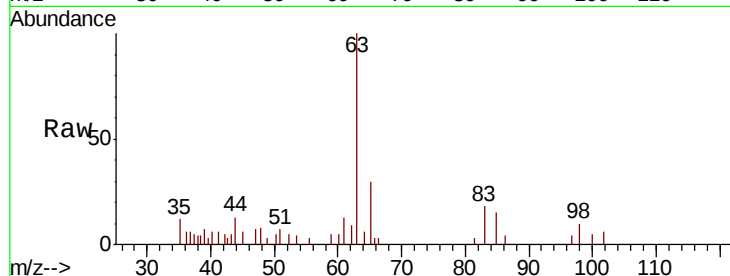
Tot Ion: 63 Resp: 4153

Ion Ratio Lower Upper

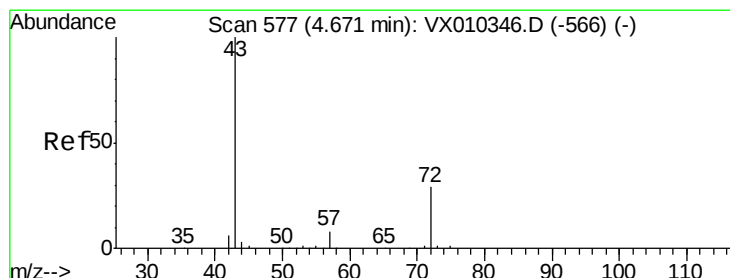
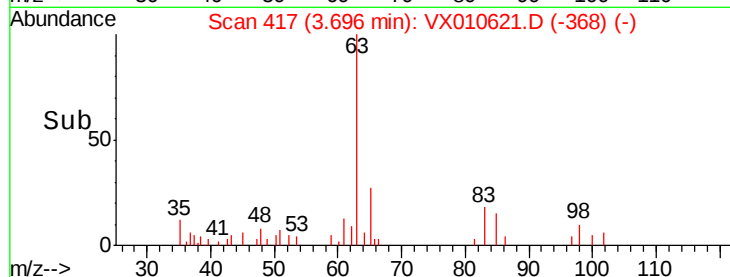
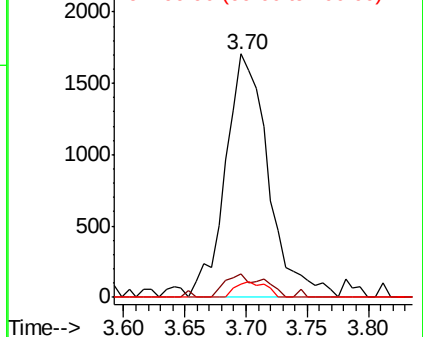
63 100

98 9.8 3.9 11.7

100 5.2 2.4 7.1



Abundance Ion 62.90 (62.60 to 63.60): VX0  
Ion 97.90 (97.60 to 98.60): VX0  
Ion 99.90 (99.60 to 100.60): VX0



#25

2-Butanone

Concen: 0.203 ug/l

RT: 4.68 min Scan# 579

Delta R.T. 0.01 min

Lab File: VX010621.D

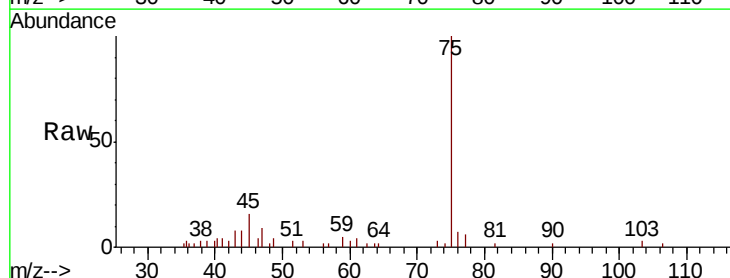
Acq: 02 Jul 2019 16:47

Tgt Ion: 43 Resp: 341

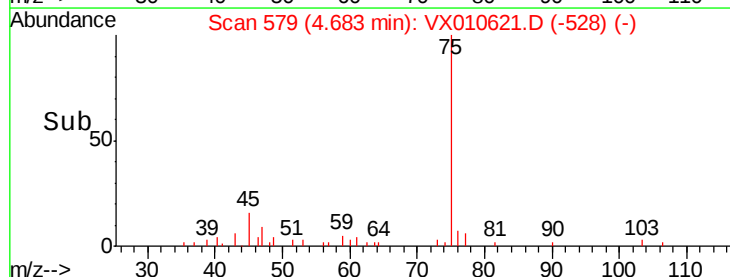
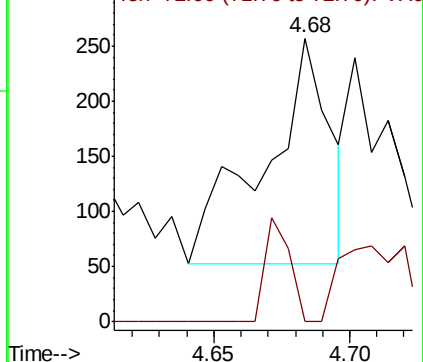
Ion Ratio Lower Upper

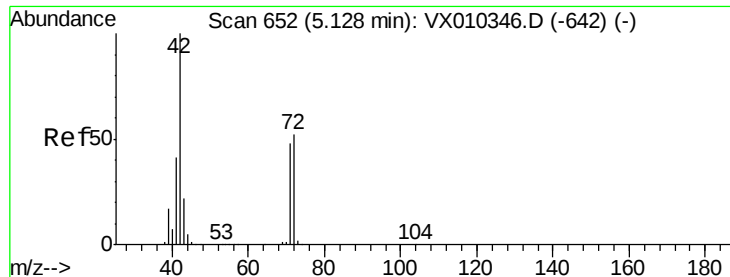
43 100

72 0.0 23.3 34.9#



Abundance Ion 43.00 (42.70 to 43.70): VX0  
Ion 72.00 (71.70 to 72.70): VX0





#29

Tetrahydrofuran

Concen: 3.256 ug/l

RT: 5.13 min Scan# 653

Delta R.T. 0.01 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

SP19-JMW0961

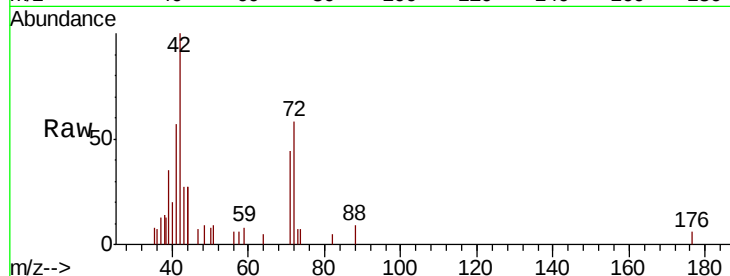
Tot Ion: 42 Resp: 3386

Ion Ratio Lower Upper

42 100

72 55.6 40.6 60.8

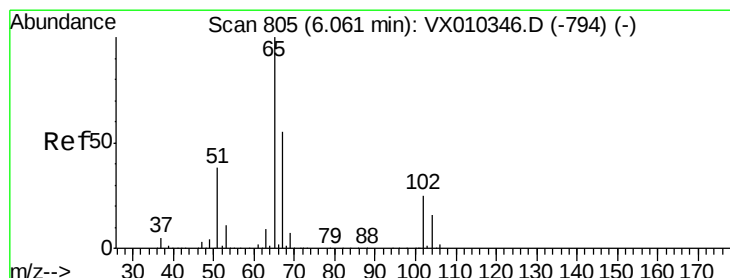
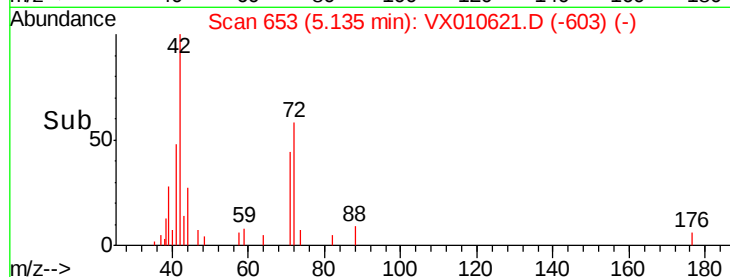
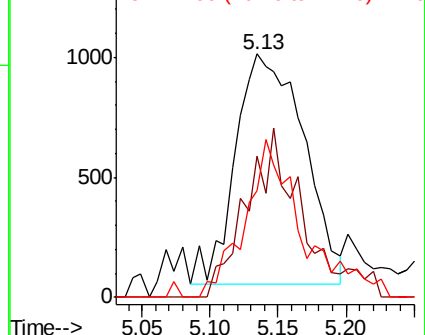
71 57.4 37.8 56.8#



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 51.729 ug/l

RT: 6.06 min Scan# 805

Delta R.T. 0.00 min

Lab File: VX010621.D

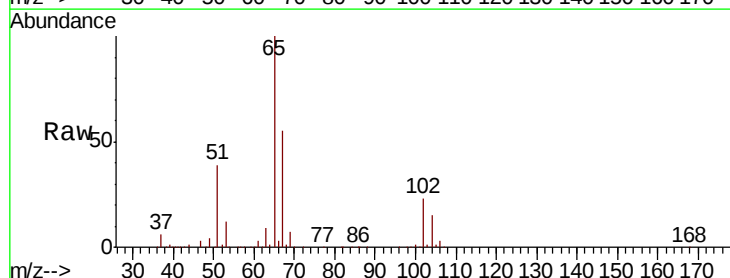
Acq: 02 Jul 2019 16:47

Tgt Ion: 65 Resp: 118127

Ion Ratio Lower Upper

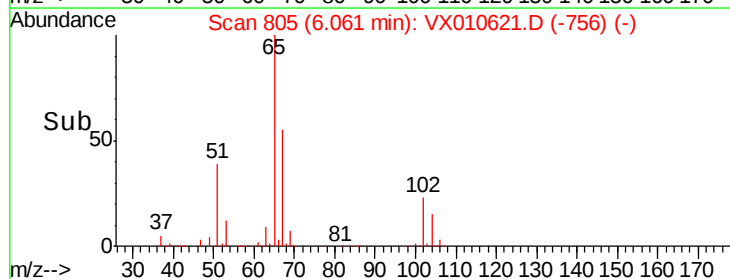
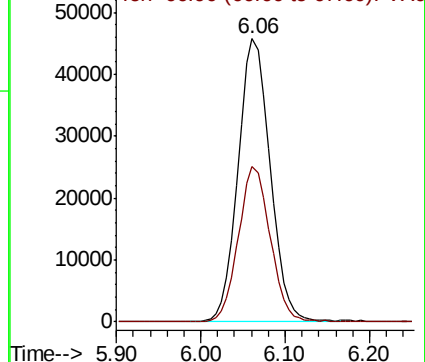
65 100

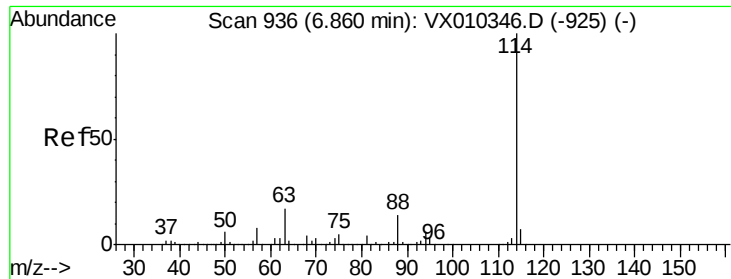
67 54.4 0.0 110.2



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: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

SP19-JMW0961

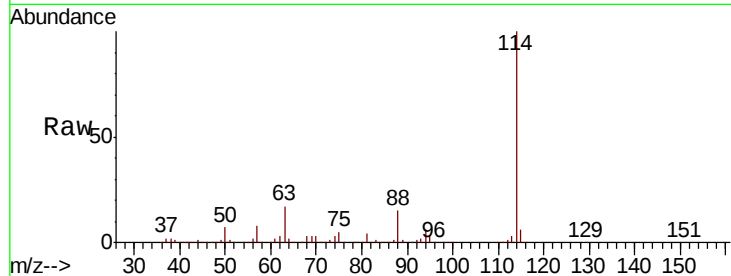
Tot Ion:114 Resp: 372033

Ion Ratio Lower Upper

114 100

63 17.0 0.0 33.8

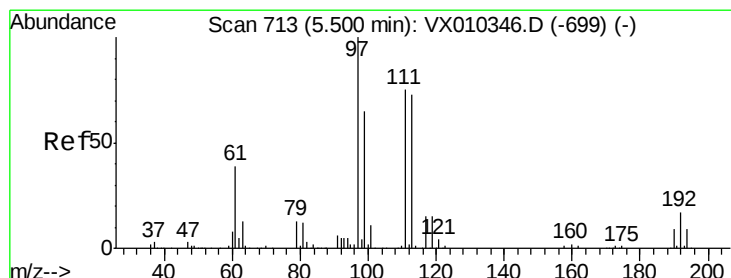
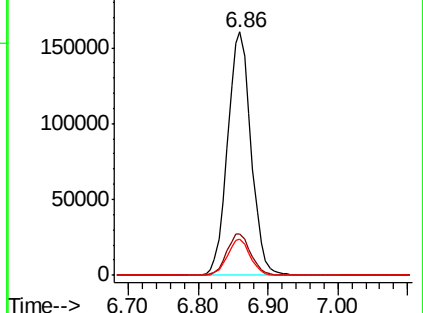
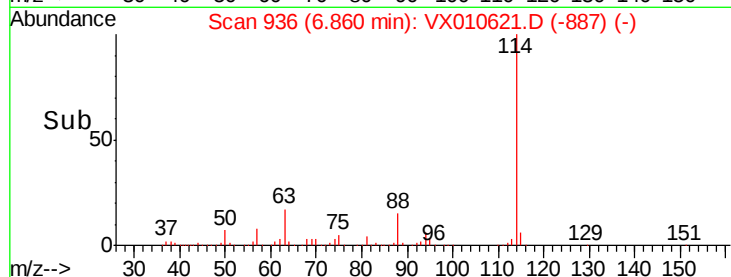
88 15.0 0.0 27.6



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: 50.378 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

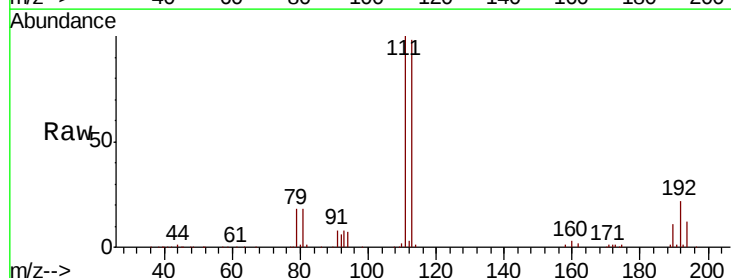
Tgt Ion:113 Resp: 114671

Ion Ratio Lower Upper

113 100

111 102.2 81.2 121.8

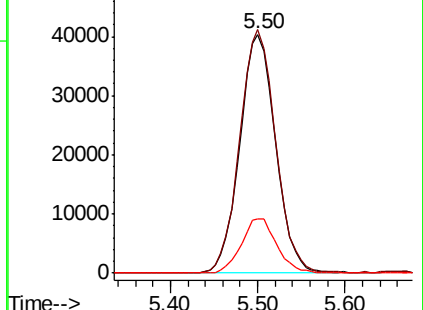
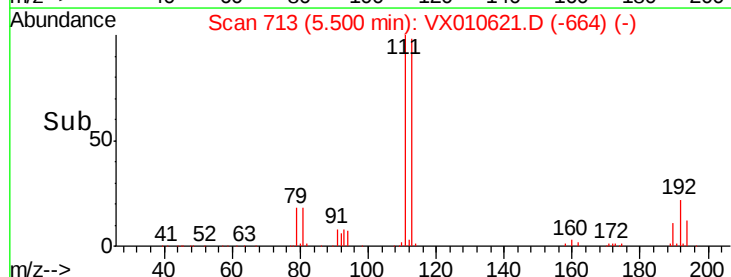
192 22.5 18.6 27.8

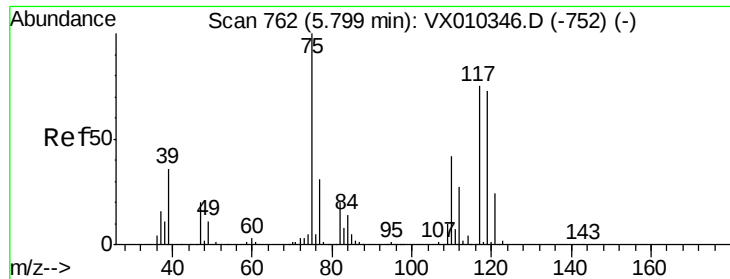


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

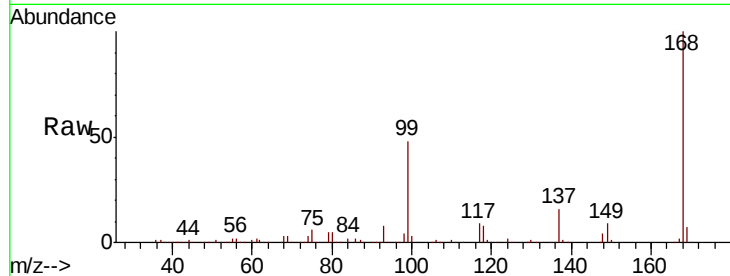




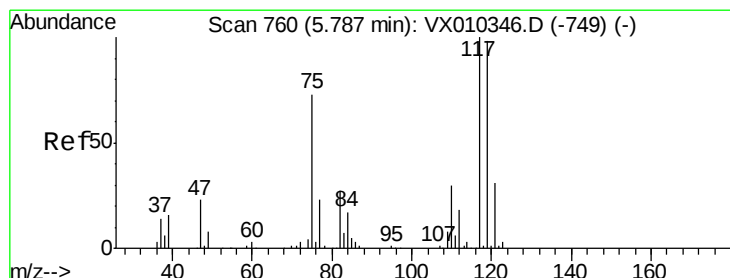
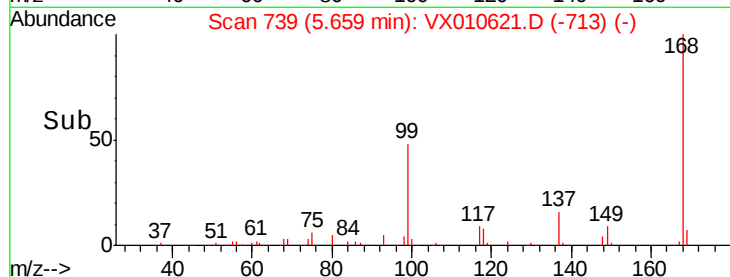
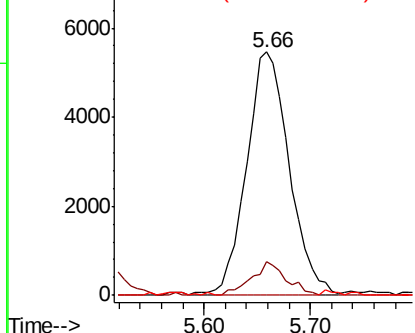
#36  
 1,1-Dichloropropene  
 Concen: 5.207 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX010621.D  
 Acq: 02 Jul 2019 16:47

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SP19-JMW0961

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 11.1  | 20.8  | 62.2# |
| 77      | 0.0   | 25.4  | 38.0# |

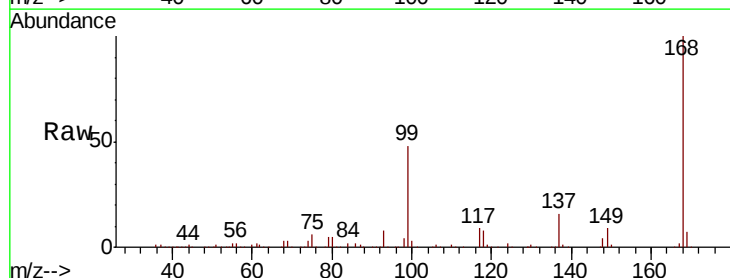


Abundance Ion 74.90 (74.60 to 75.60): VX0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VX0

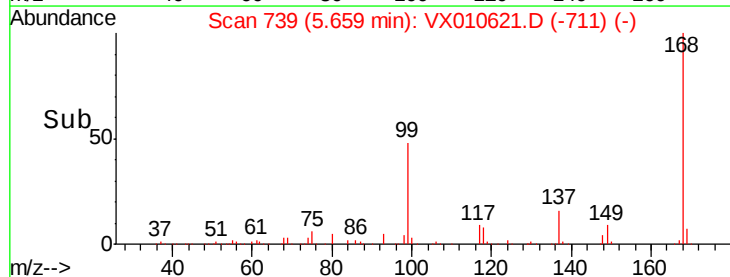
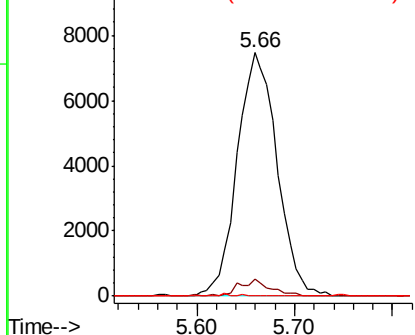


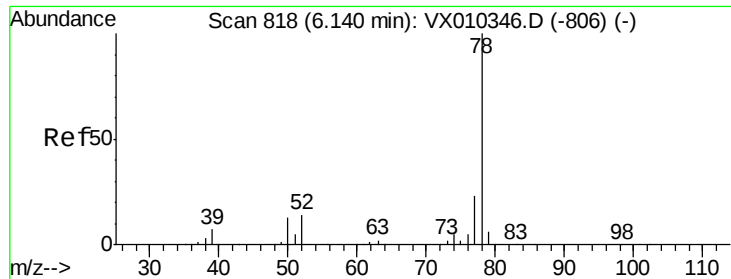
#38  
 Carbon Tetrachloride  
 Concen: 6.587 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.13 min  
 Lab File: VX010621.D  
 Acq: 02 Jul 2019 16:47

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.8   | 78.2  | 117.4# |
| 121     | 0.0   | 24.7  | 37.1#  |



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





#40

Benzene

Concen: 1.095 ug/l

RT: 6.14 min Scan# 818

Delta R.T. 0.00 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

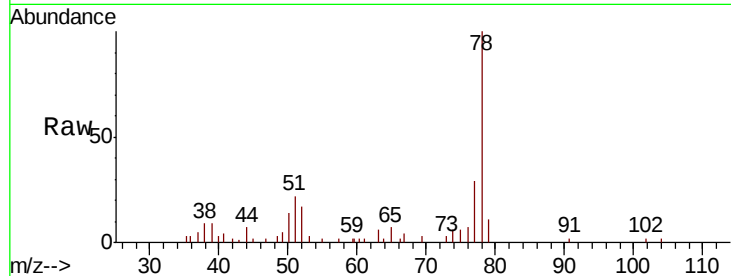
SP19-JMW0961

Tot Ion: 78 Resp: 10081

Ion Ratio Lower Upper

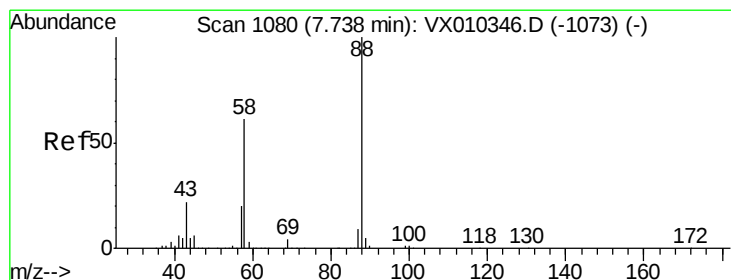
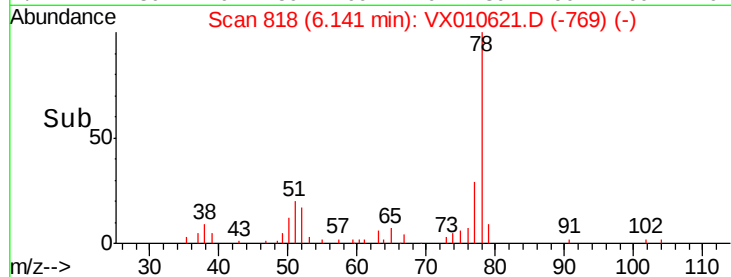
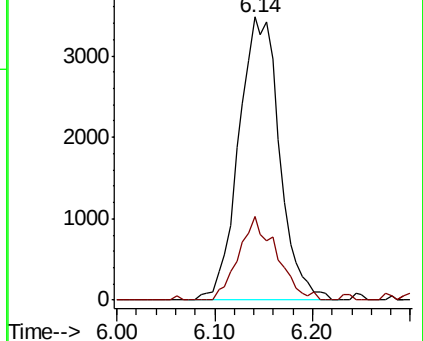
78 100

77 29.5 18.6 28.0#



Abundance Ion 78.00 (77.70 to 78.70): VX0

Ion 77.00 (76.70 to 77.70): VX0



#49

1,4-Dioxane

Concen: 0.282 ug/l

RT: 7.73 min Scan# 1078

Delta R.T. -0.01 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

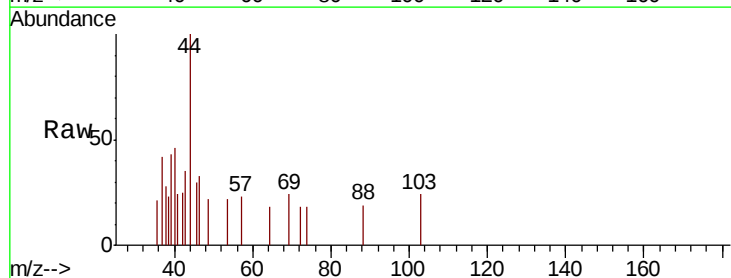
Tgt Ion: 88 Resp: 19

Ion Ratio Lower Upper

88 100

43 747.4 20.2 30.2#

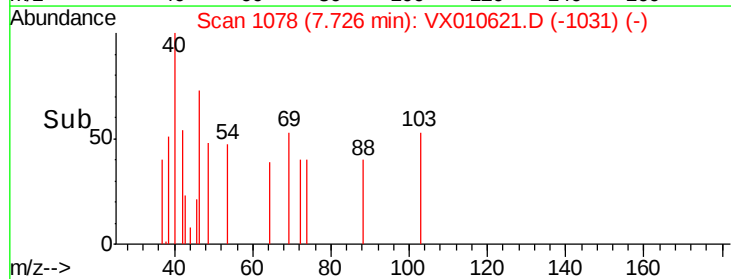
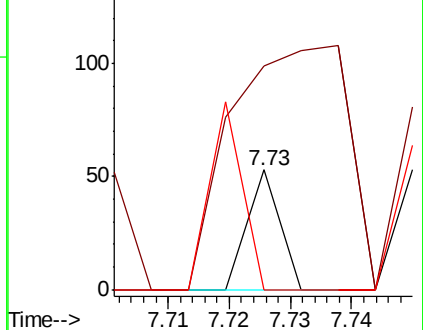
58 157.9 49.5 74.3#

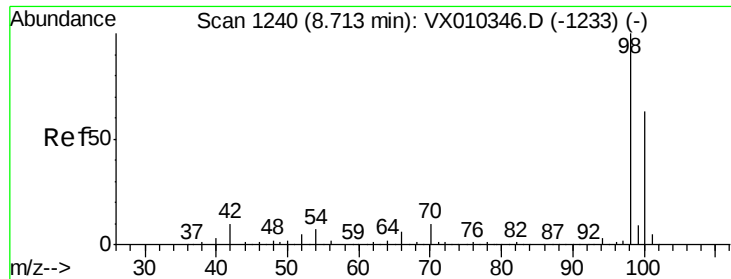


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#50

Toluene-d8

Concen: 50.750 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

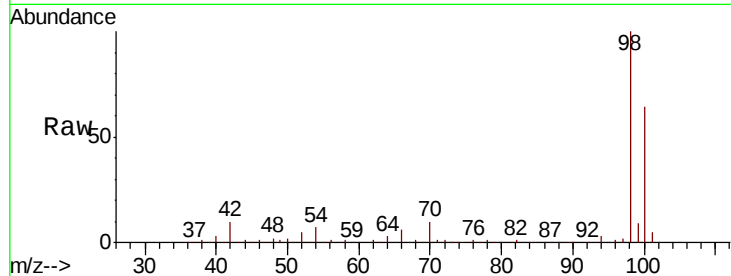
SP19-JMW0961

Tot Ion: 98 Resp: 441951

Ion Ratio Lower Upper

98 100

100 64.0 51.6 77.4



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

8.71

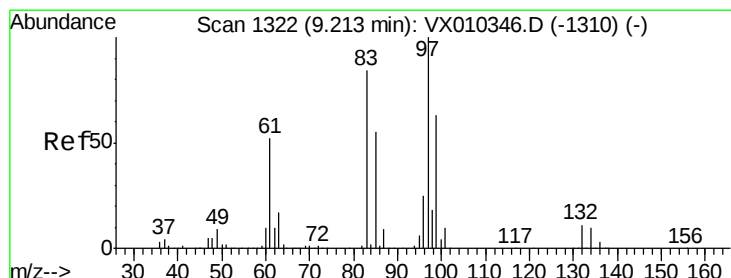
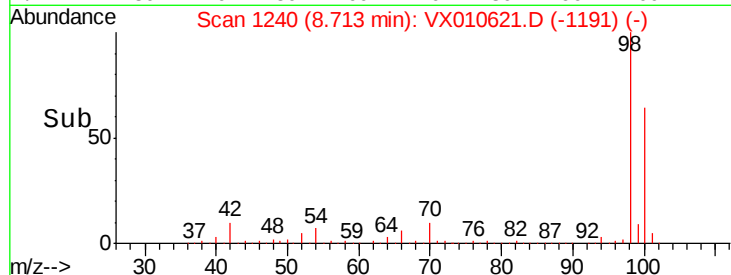
300000

200000

100000

0

Time--> 8.60 8.65 8.70 8.75 8.80



#55

1,1,2-Trichloroethane

Concen: 0.588 ug/l

RT: 9.16 min Scan# 1314

Delta R.T. -0.05 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Tgt Ion: 97 Resp: 1471

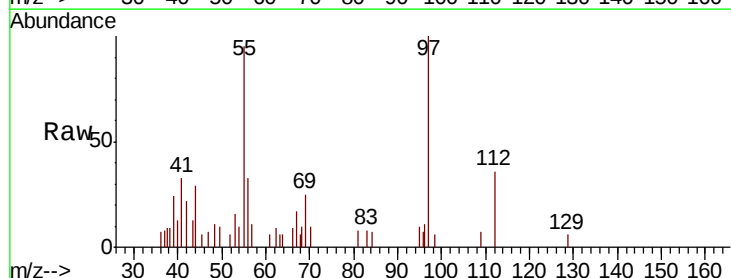
Ion Ratio Lower Upper

97 100

83 7.8 67.4 101.0#

85 0.0 43.8 65.8#

99 0.0 50.3 75.5#



Abundance Ion 96.90 (96.60 to 97.60): VX0

Ion 82.90 (82.60 to 83.60): VX0

Ion 84.90 (84.60 to 85.60): VX0

Ion 98.90 (98.60 to 99.60): VX0

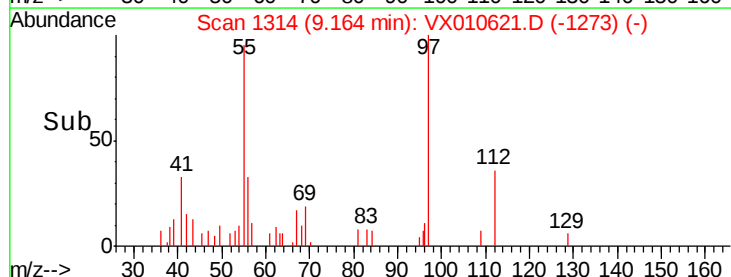
9.16

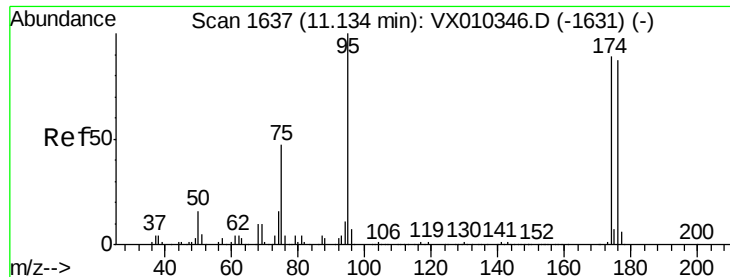
1000

500

0

Time--> 9.10 9.15 9.20





#62

4-Bromofluorobenzene

Concen: 47.659 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

SP19-JMW0961

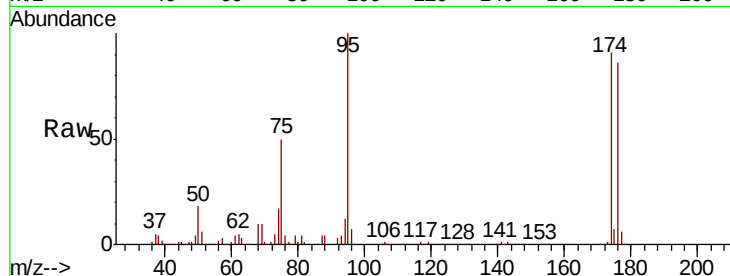
Tot Ion: 95 Resp: 149838

Ion Ratio Lower Upper

95 100

174 94.7 0.0 187.6

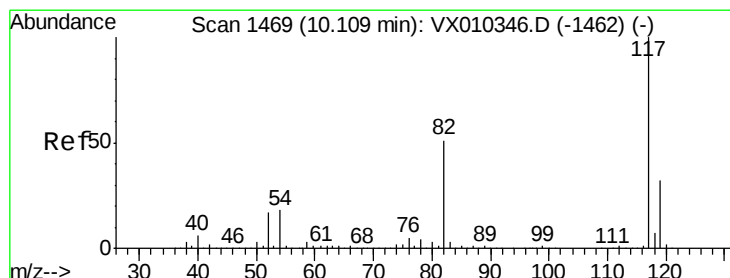
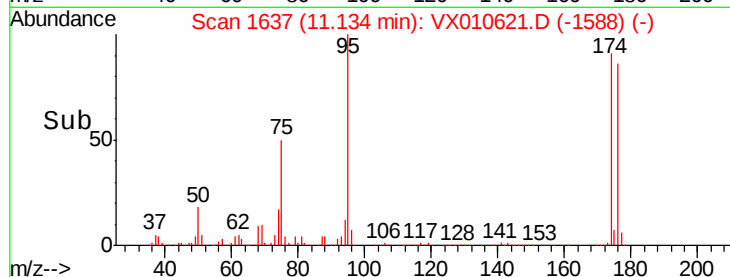
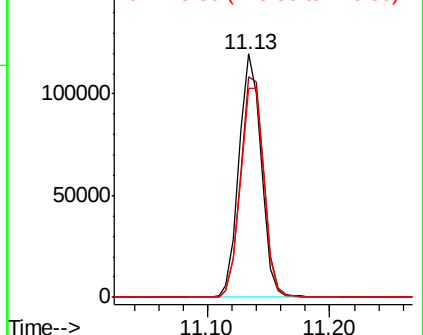
176 91.1 0.0 184.0



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: VX010621.D

Acq: 02 Jul 2019 16:47

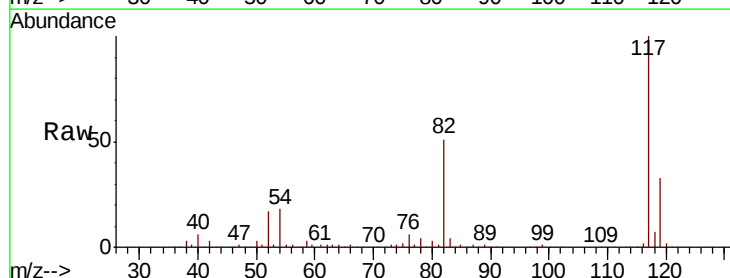
Tgt Ion: 117 Resp: 342663

Ion Ratio Lower Upper

117 100

82 51.0 41.2 61.8

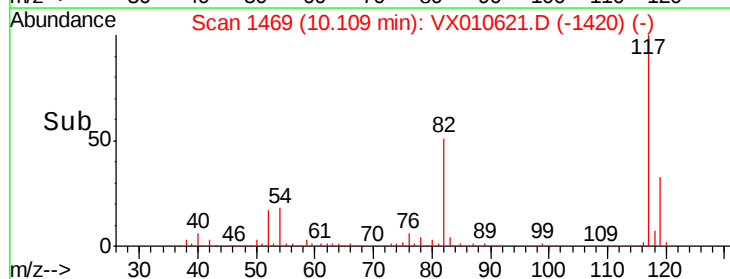
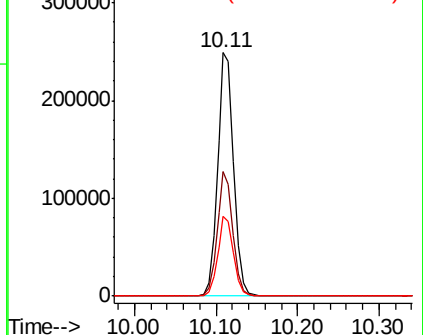
119 32.5 25.5 38.3

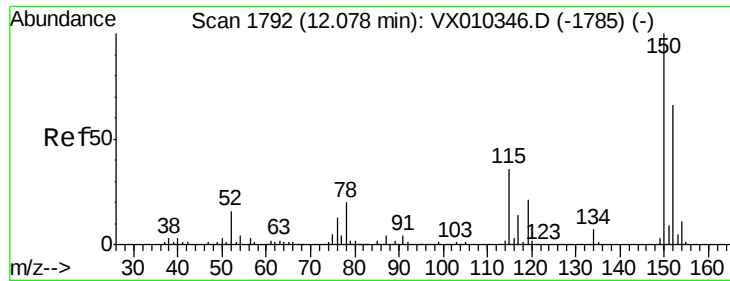


Abundance Ion 116.90 (116.60 to 117.60): V

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: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

SP19-JMW0961

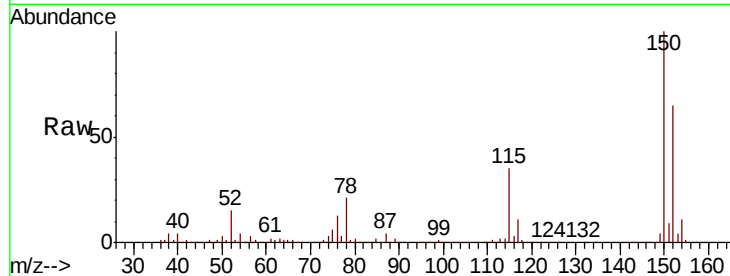
Tot Ion:152 Resp: 158818

Ion Ratio Lower Upper

152 100

115 55.8 38.6 115.7

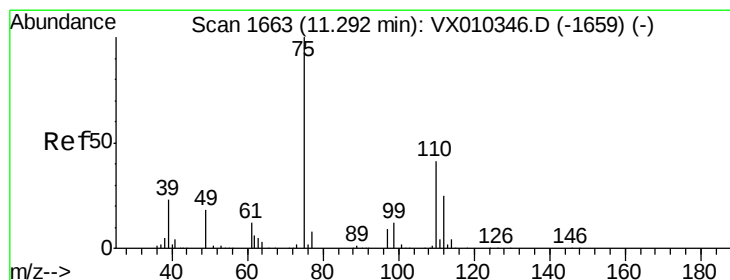
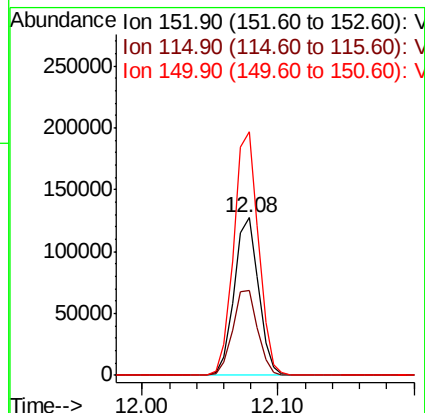
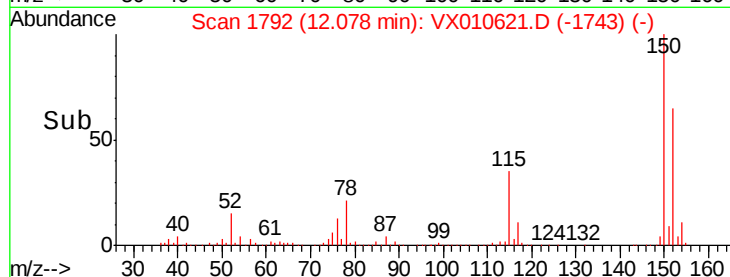
150 156.5 0.0 347.4



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: 24.917 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX010621.D

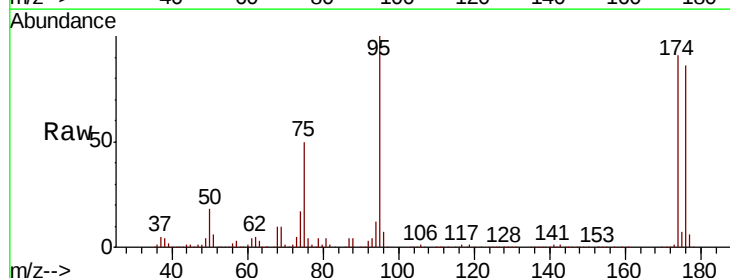
Acq: 02 Jul 2019 16:47

Tgt Ion: 75 Resp: 72113

Ion Ratio Lower Upper

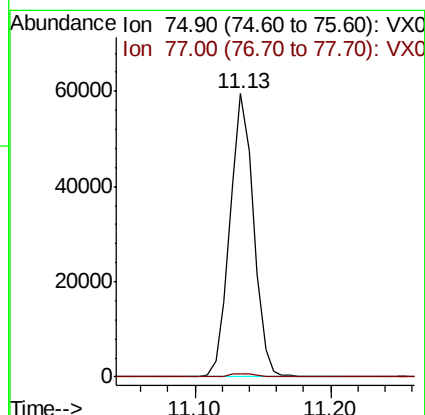
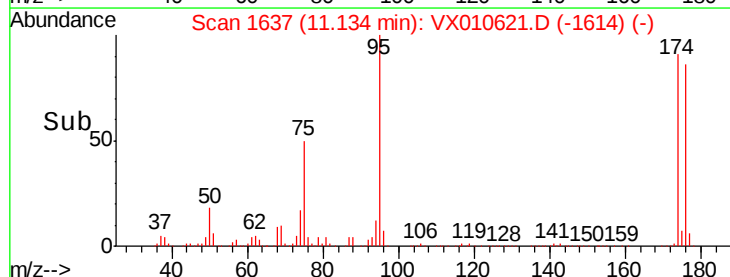
75 100

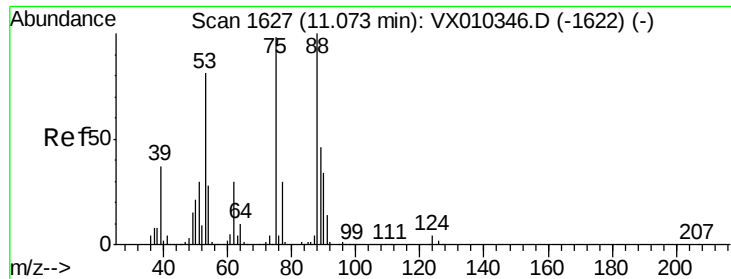
77 1.5 22.6 67.8#



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: 58.130 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX010621.D

Acq: 02 Jul 2019 16:47

Instrument :

MSVOA\_X

ClientSampleId :

SP19-JMW0961

Tot Ion: 75 Resp: 72113

Ion Ratio Lower Upper

75 100

53 0.2 66.1 99.1#

89 0.1 37.8 56.6#

