

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX072919\  
 Data File : VX011151.D  
 Acq On : 29 Jul 2019 17:22  
 Operator : JC/SP  
 Sample : K4026-07  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0675

Quant Time: Jul 30 05:07:46 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

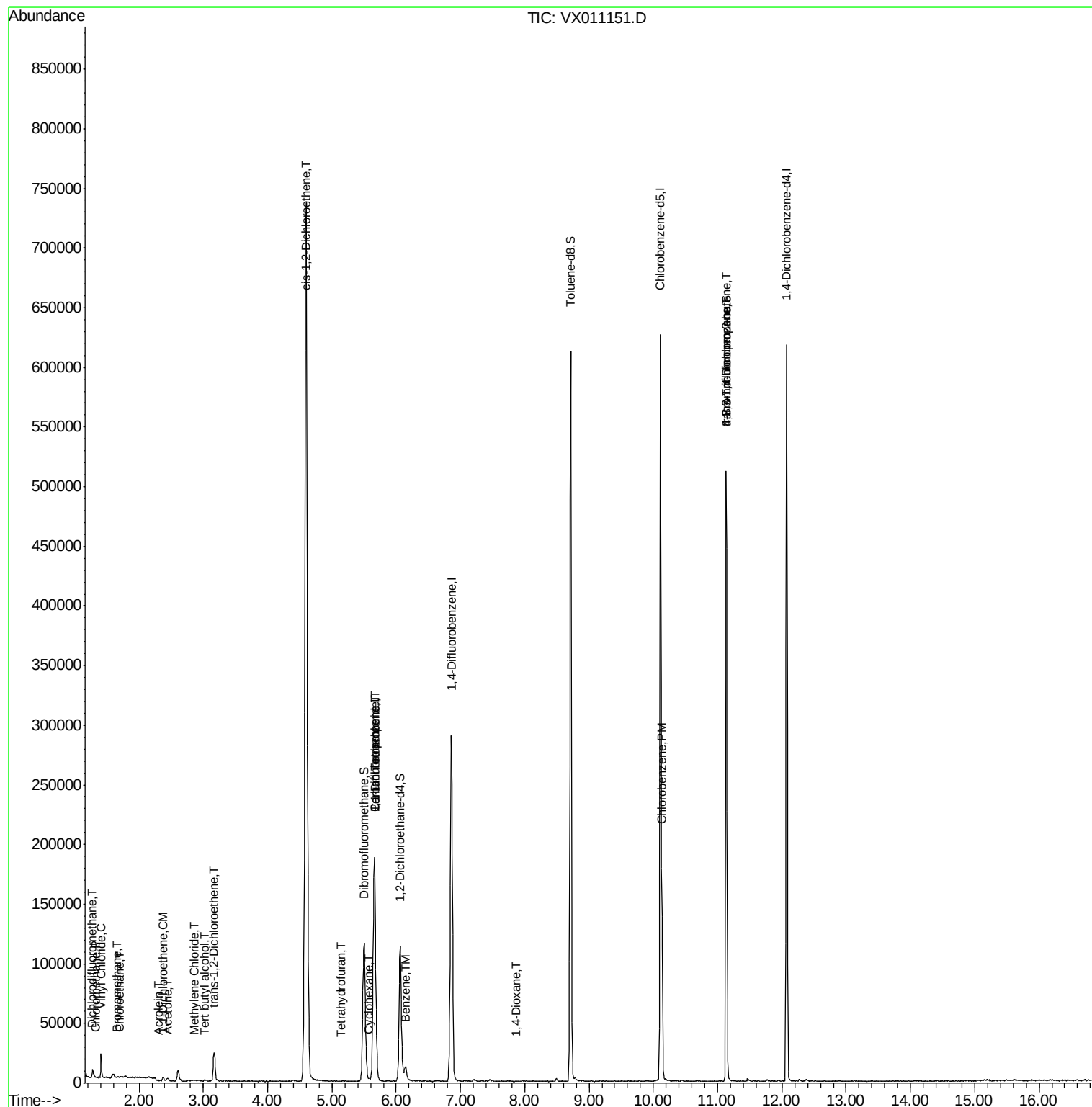
| Internal Standards             | R.T.   | QIon | Response | Conc    | Units   | Dev(Min) |
|--------------------------------|--------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene          | 5.67   | 168  | 189586   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene        | 6.86   | 114  | 302673   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5           | 10.11  | 117  | 284408   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 12.07  | 152  | 129471   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds    |        |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4      | 6.06   | 65   | 104698   | 51.91   | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =       | 103.82% |          |
| 35) Dibromofluoromethane       | 5.50   | 113  | 95601    | 49.76   | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =       | 99.52%  |          |
| 50) Toluene-d8                 | 8.71   | 98   | 366555   | 50.87   | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =       | 101.74% |          |
| 62) 4-Bromofluorobenzene       | 11.13  | 95   | 125372   | 47.34   | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =       | 94.68%  |          |
| Target Compounds               |        |      |          |         |         |          |
|                                |        |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane     | 1.26   | 85   | 44       | 0.568   | ug/l #  | 43       |
| 3) Chloromethane               | 1.33   | 50   | 760      | 0.436   | ug/l    | 96       |
| 4) Vinyl Chloride              | 1.41   | 62   | 12920    | 7.265   | ug/l    | 99       |
| 5) Bromomethane                | 1.65   | 94   | 433      | 0.432   | ug/l    | 90       |
| 6) Chloroethane                | 1.70   | 64   | 312      | 0.276   | ug/l #  | 41       |
| 11) Tert butyl alcohol         | 3.03   | 59   | 1036     | 2.206   | ug/l #  | 73       |
| 12) 1,1-Dichloroethene         | 2.38   | 96   | 873      | 0.517   | ug/l    | 84       |
| 13) Acrolein                   | 2.30   | 56   | 76       | 0.280   | ug/l #  | 14       |
| 16) Acetone                    | 2.44   | 43   | 2503     | 2.748   | ug/l    | 98       |
| 20) Methylene Chloride         | 2.85   | 84   | 452      | 0.234   | ug/l #  | 81       |
| 21) trans-1,2-Dichloroethene   | 3.17   | 96   | 10572    | 5.900   | ug/l #  | 81       |
| 27) cis-1,2-Dichloroethene     | 4.60   | 96   | 497518   | 239.920 | ug/l    | 89       |
| 29) Tetrahydrofuran            | 5.15   | 42   | 258      | 0.311   | ug/l #  | 29       |
| 31) Cyclohexane                | 5.58   | 56   | 761      | 0.278   | ug/l #  | 67       |
| 36) 1,1-Dichloropropene        | 5.66   | 75   | 12848    | 5.168   | ug/l #  | 49       |
| 38) Carbon Tetrachloride       | 5.66   | 117  | 17489    | 6.751   | ug/l #  | 18       |
| 40) Benzene                    | 6.14   | 78   | 14162    | 1.860   | ug/l    | 100      |
| 49) 1,4-Dioxane                | 7.86   | 88   | 19       | 0.333   | ug/l #  | 31       |
| 65) Chlorobenzene              | 10.13  | 112  | 52636    | 9.011   | ug/l    | 99       |
| 76) 1,2,3-Trichloropropane     | 11.13  | 75   | 63596    | 27.220  | ug/l #  | 35       |
| 81) trans-1,4-Dichloro-2-buten | 11.13  | 75   | 63596    | 67.454  | ug/l #  | 11       |

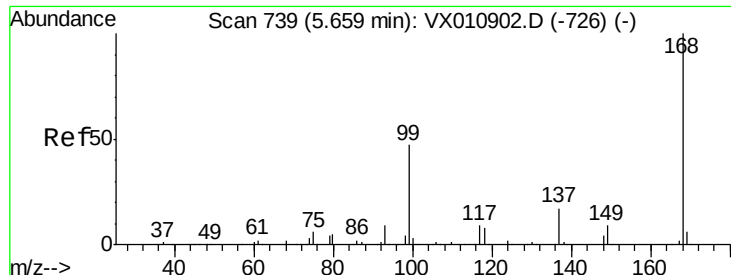
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX072919\  
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Quant Title : SW846 8260  
QLast Update : Wed Jul 24 05:39:23 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.01 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

Instrument :

MSVOA\_X

ClientSampleId :

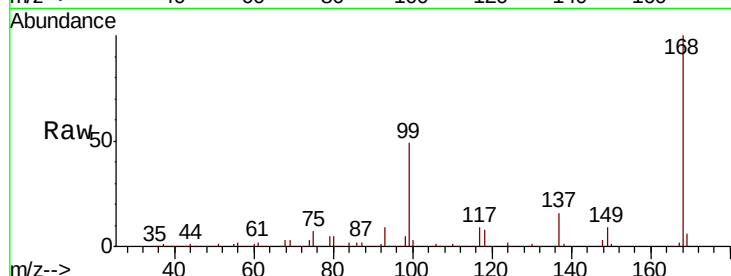
Z3-0675

Tot Ion:168 Resp: 189586

Ion Ratio Lower Upper

168 100

99 48.9 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

80000

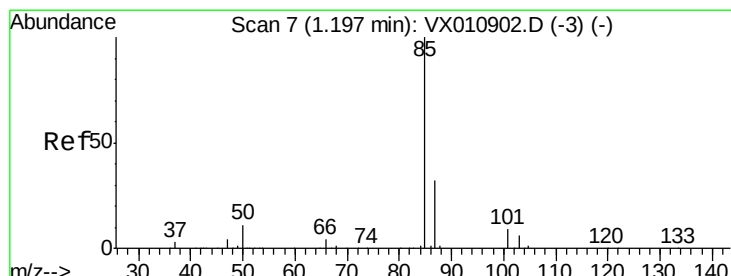
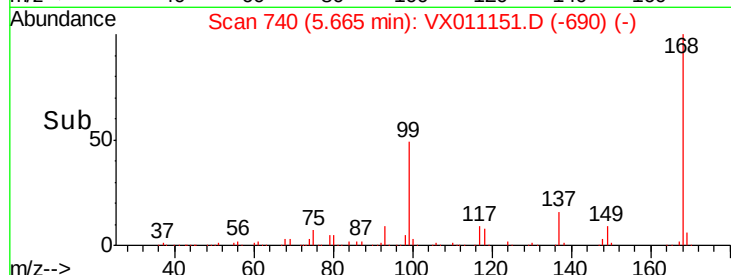
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#2

Dichlorodifluoromethane

Concen: 0.568 ug/l

RT: 1.26 min Scan# 18

Delta R.T. 0.07 min

Lab File: VX011151.D

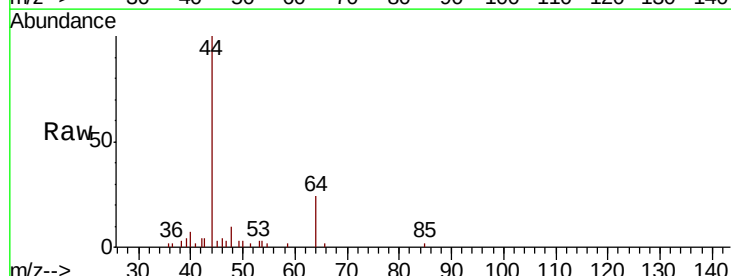
Acq: 29 Jul 2019 17:22

Tgt Ion: 85 Resp: 44

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

80

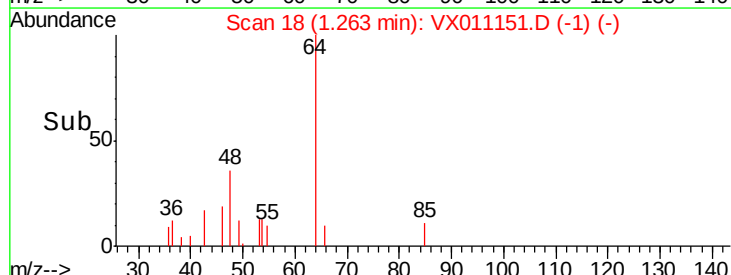
60

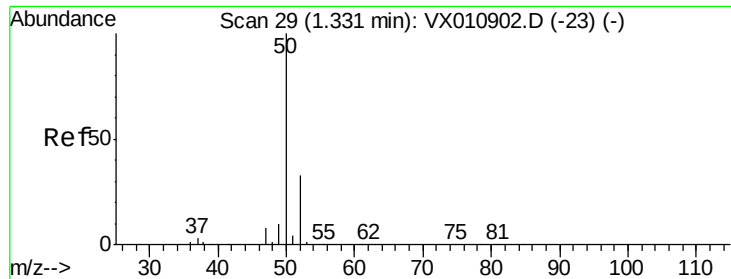
40

20

0

Time--> 1.24 1.26 1.28





#3

Chloromethane

Concen: 0.436 ug/l

RT: 1.33 min Scan# 29

Delta R.T. -0.00 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

Instrument :

MSVOA\_X

ClientSampleId :

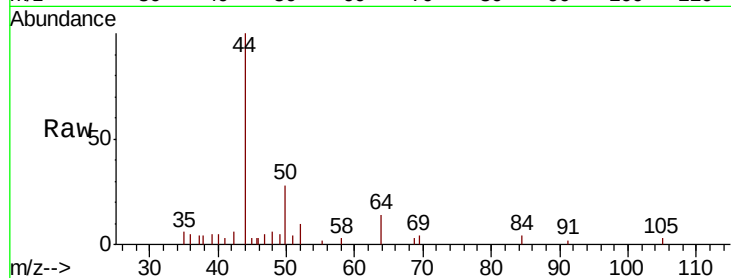
Z3-0675

Tot Ion: 50 Resp: 760

Ion Ratio Lower Upper

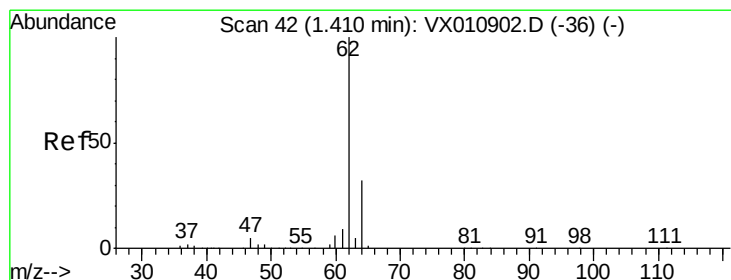
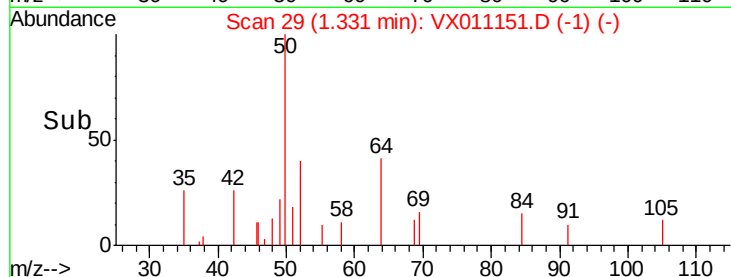
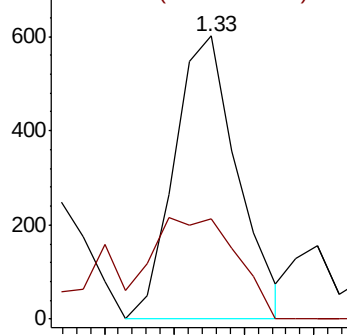
50 100

52 35.4 26.4 39.6



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0



#4

Vinyl Chloride

Concen: 7.265 ug/l

RT: 1.41 min Scan# 42

Delta R.T. -0.00 min

Lab File: VX011151.D

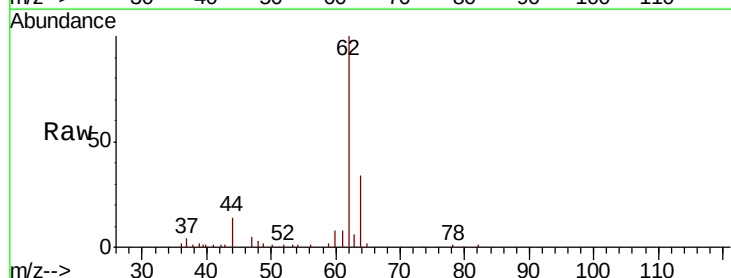
Acq: 29 Jul 2019 17:22

Tgt Ion: 62 Resp: 12920

Ion Ratio Lower Upper

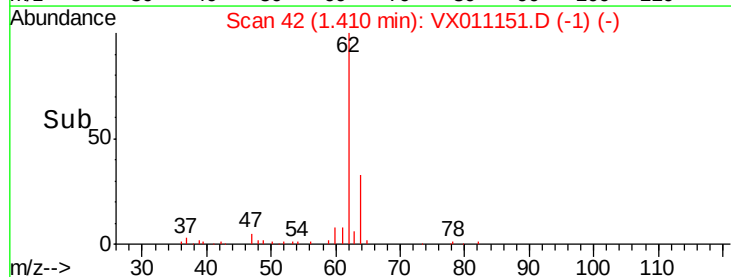
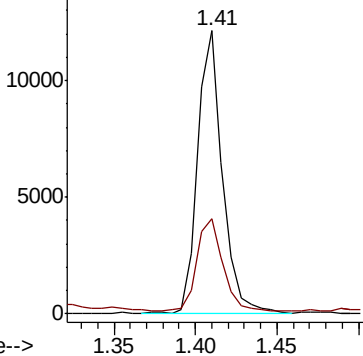
62 100

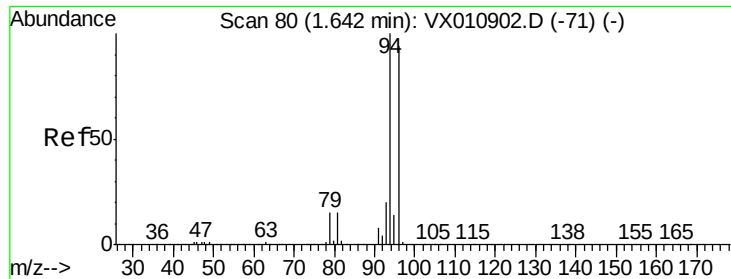
64 32.4 25.7 38.5



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0





#5

Bromomethane

Concen: 0.432 ug/l

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

Instrument :

MSVOA\_X

ClientSampled :

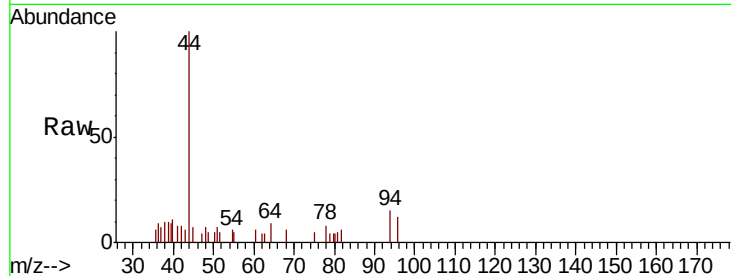
Z3-0675

Tot Ion: 94 Resp: 433

Ion Ratio Lower Upper

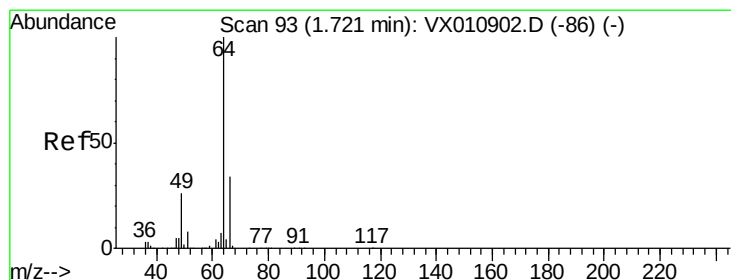
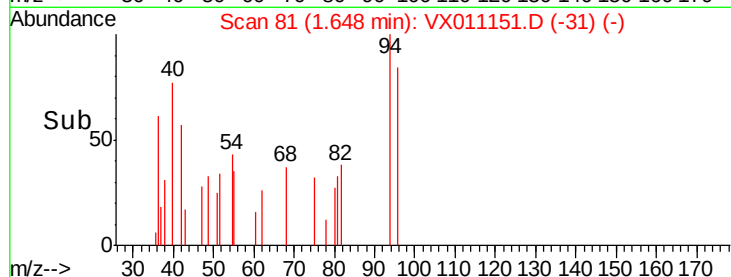
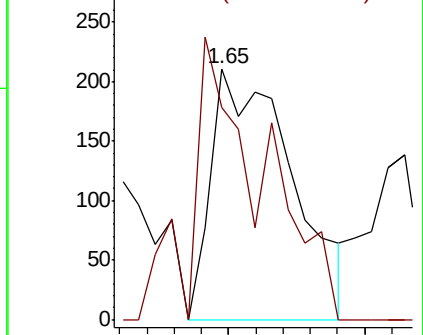
94 100

96 84.4 75.6 113.4



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: 0.276 ug/l

RT: 1.70 min Scan# 90

Delta R.T. -0.02 min

Lab File: VX011151.D

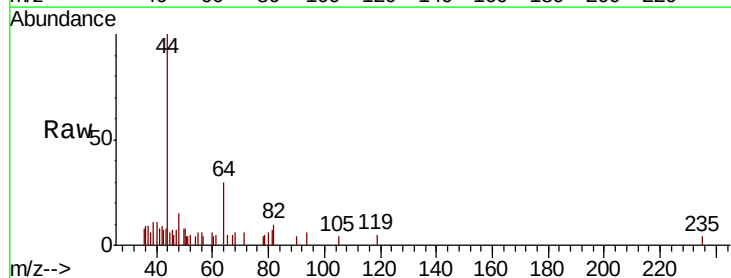
Acq: 29 Jul 2019 17:22

Tgt Ion: 64 Resp: 312

Ion Ratio Lower Upper

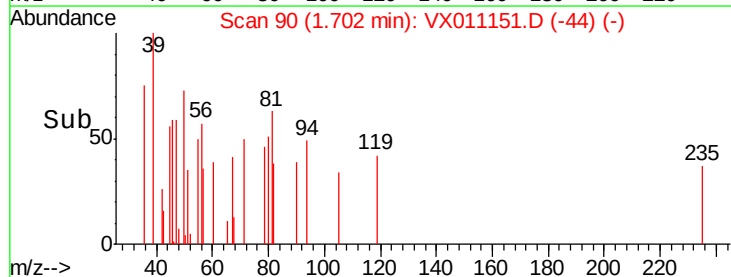
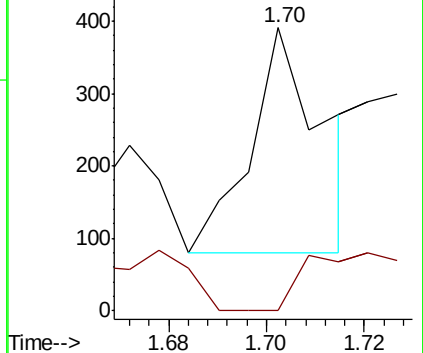
64 100

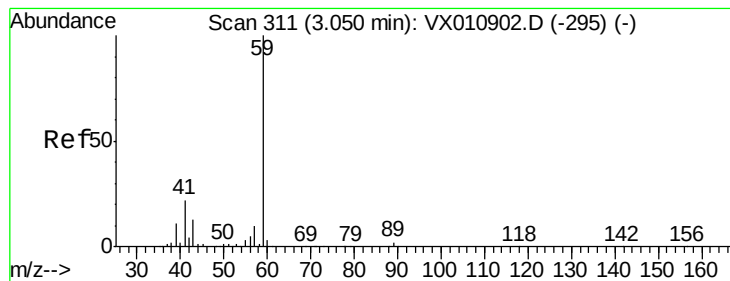
66 0.0 27.0 40.6#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



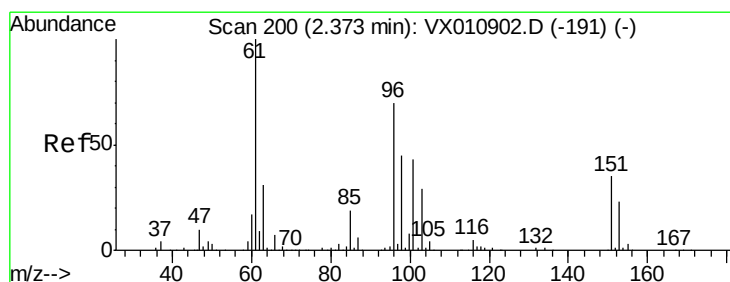
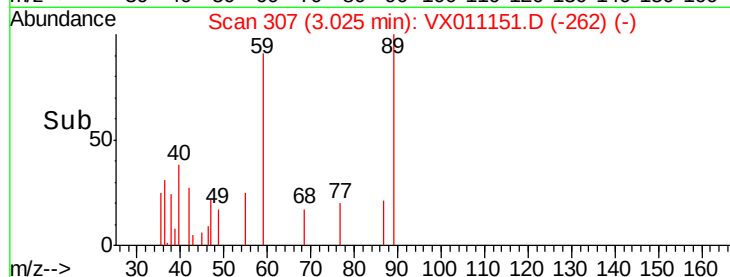
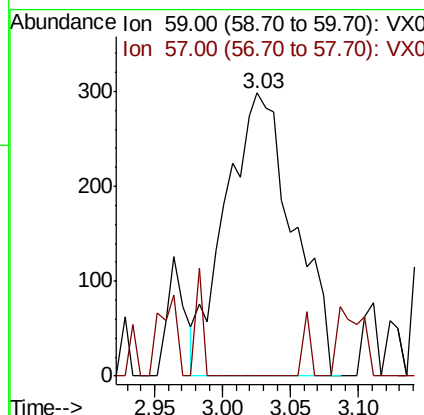
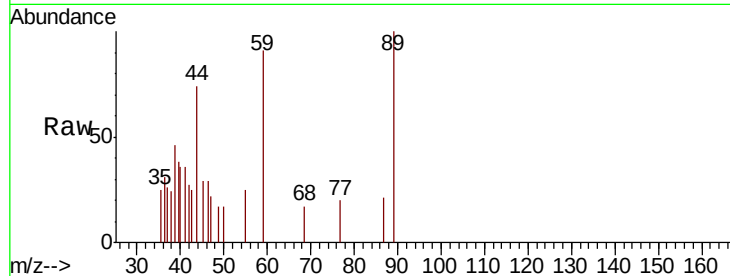


#11

Tert butyl alcohol  
 Concen: 2.206 ug/l  
 RT: 3.03 min Scan# 307  
 Delta R.T. -0.02 min  
 Lab File: VX011151.D  
 Acq: 29 Jul 2019 17:22

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-0675

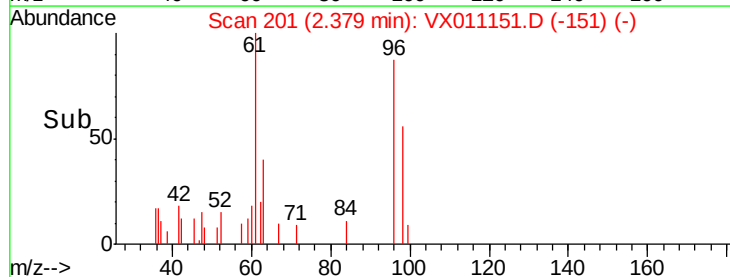
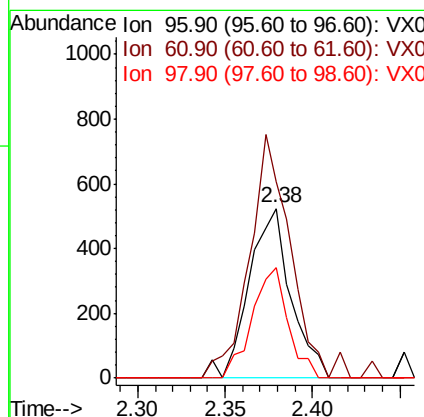
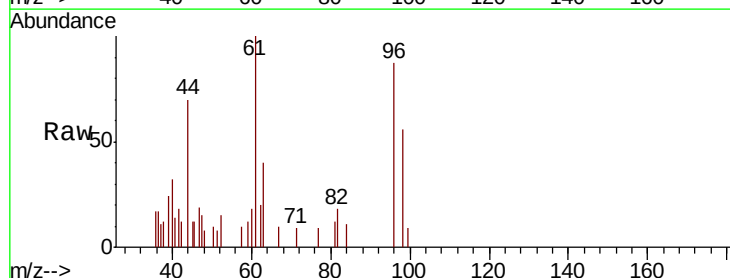
Tot Ion: 59 Resp: 1036  
 Ion Ratio Lower Upper  
 59 100  
 57 0.0 7.9 11.9#

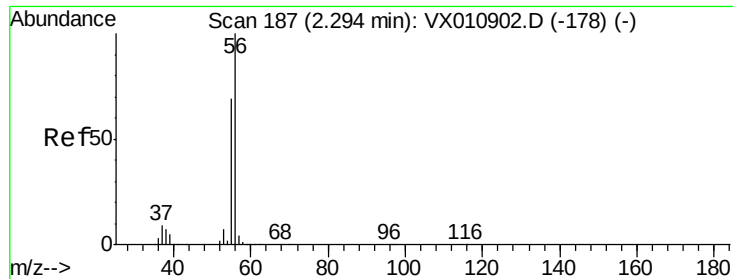


#12

1,1-Dichloroethene  
 Concen: 0.517 ug/l  
 RT: 2.38 min Scan# 201  
 Delta R.T. 0.01 min  
 Lab File: VX011151.D  
 Acq: 29 Jul 2019 17:22

Tgt Ion: 96 Resp: 873  
 Ion Ratio Lower Upper  
 96 100  
 61 115.2 115.0 172.4  
 98 65.0 52.2 78.2





#13

Acrolein

Concen: 0.280 ug/l

RT: 2.30 min Scan# 188

Delta R.T. 0.01 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

Instrument :

MSVOA\_X

ClientSampled :

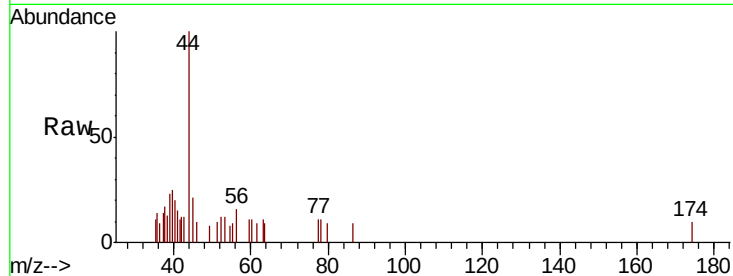
Z3-0675

Tot Ion: 56 Resp: 76

Ion Ratio Lower Upper

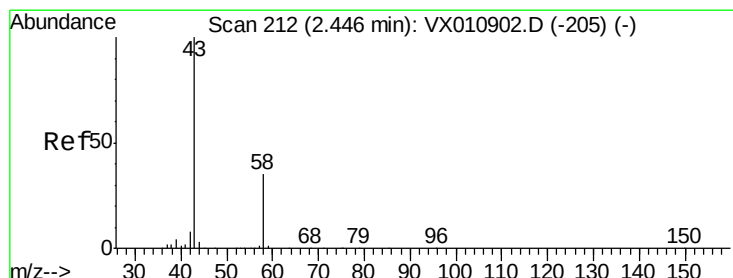
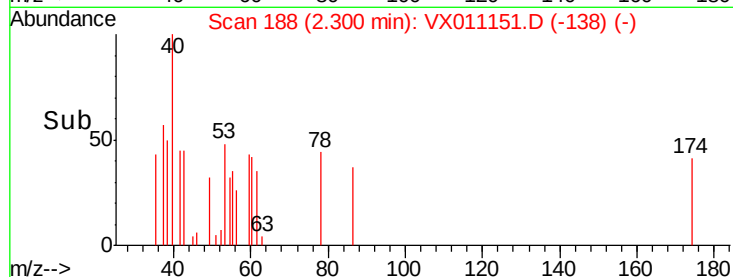
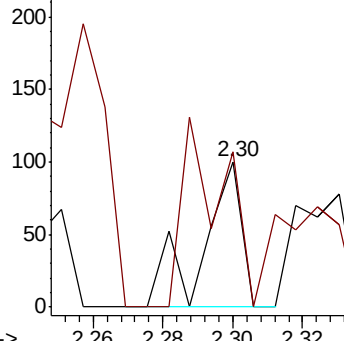
56 100

55 140.8 55.9 83.9#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 2.748 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX011151.D

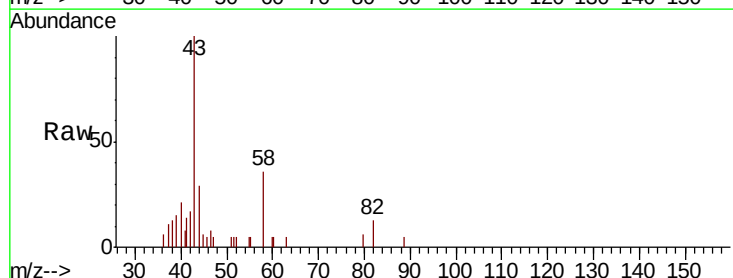
Acq: 29 Jul 2019 17:22

Tgt Ion: 43 Resp: 2503

Ion Ratio Lower Upper

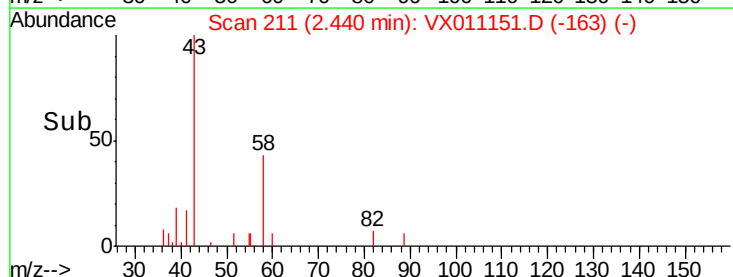
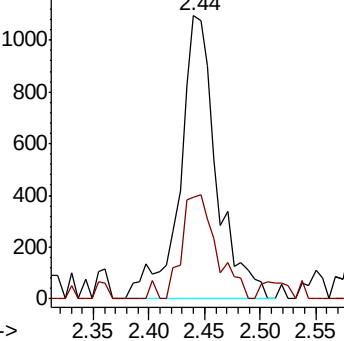
43 100

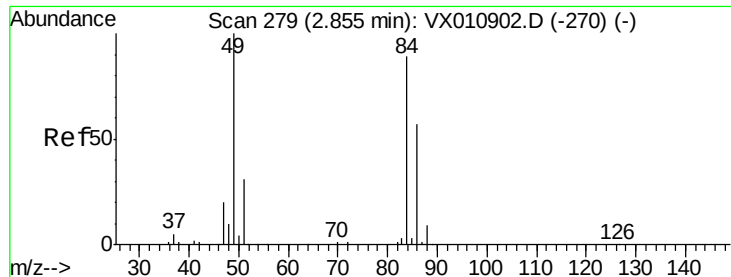
58 36.0 27.7 41.5



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

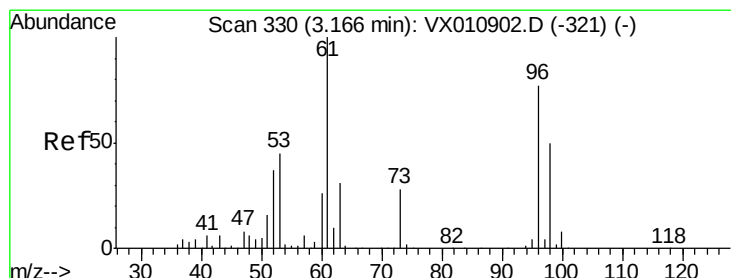
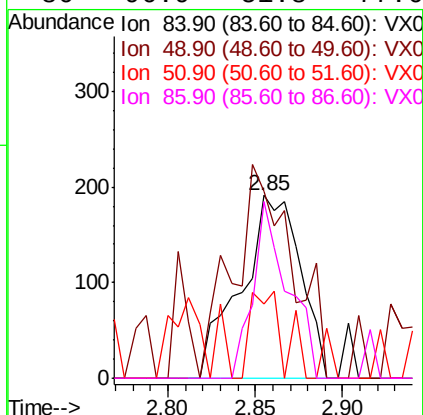
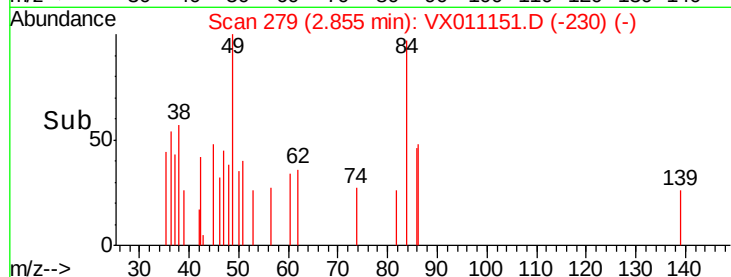
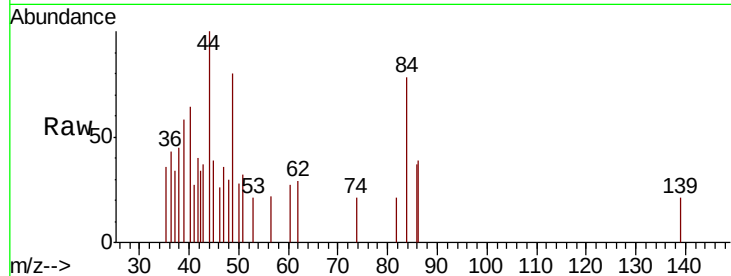




#20  
Methylene Chloride  
Concen: 0.234 ug/l  
RT: 2.85 min Scan# 279  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

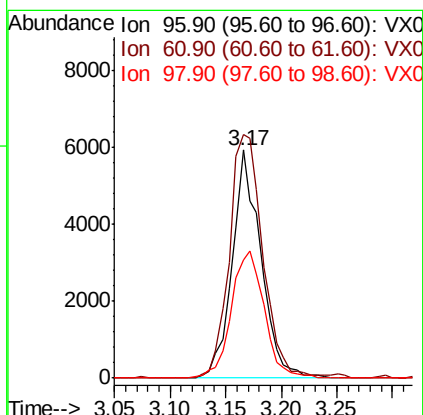
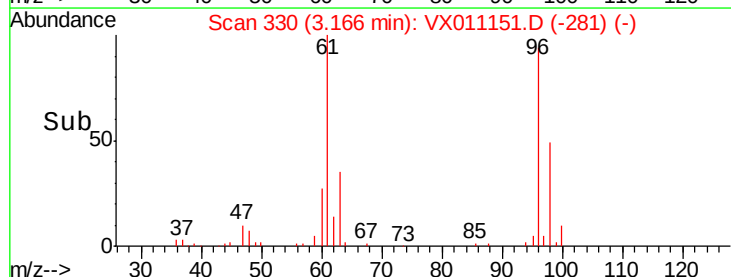
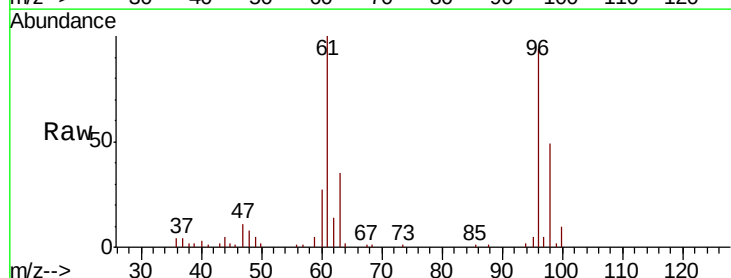
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0675

Tot Ion: 84 Resp: 452  
Ion Ratio Lower Upper  
84 100  
49 102.6 89.9 134.9  
51 40.8 27.8 41.6  
86 96.9 51.8 77.6#

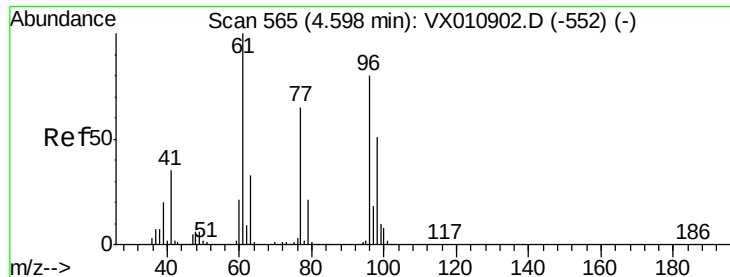


#21  
trans-1,2-Dichloroethene  
Concen: 5.900 ug/l  
RT: 3.17 min Scan# 330  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

Tgt Ion: 96 Resp: 10572  
Ion Ratio Lower Upper  
96 100  
61 106.8 104.2 156.2  
98 52.0 52.2 78.4#





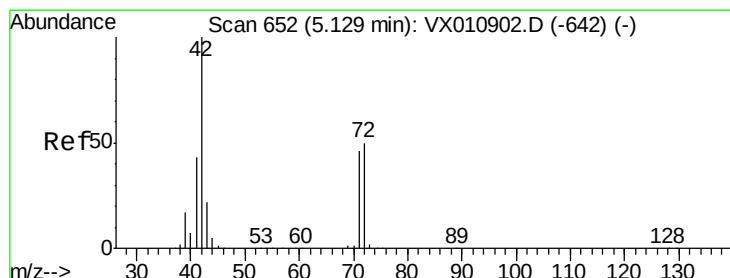
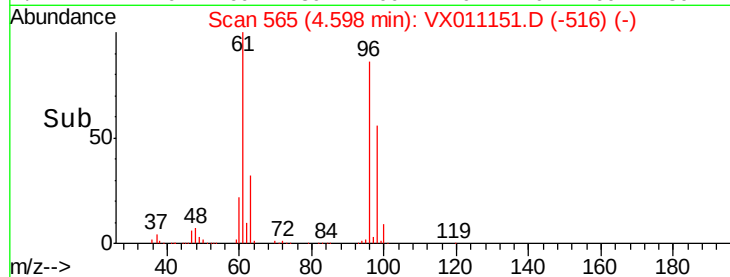
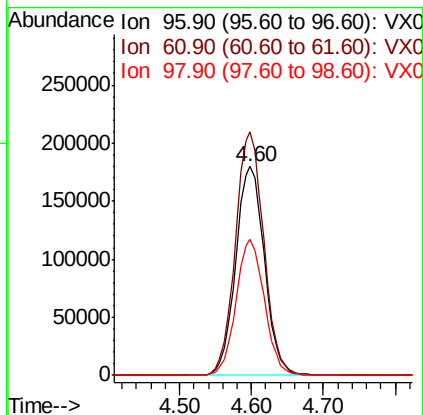
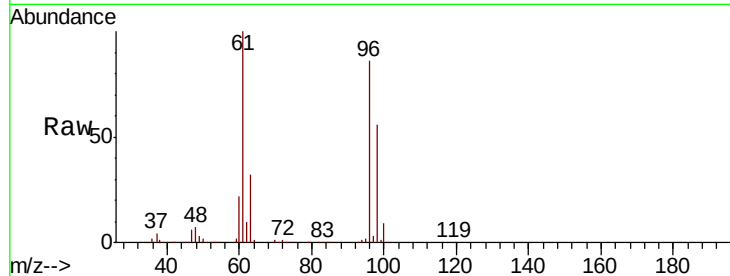


#27

cis-1,2-Dichloroethene  
 Concen: 239.920 ug/l  
 RT: 4.60 min Scan# 565  
 Delta R.T. -0.00 min  
 Lab File: VX011151.D  
 Acq: 29 Jul 2019 17:22

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 Z3-0675

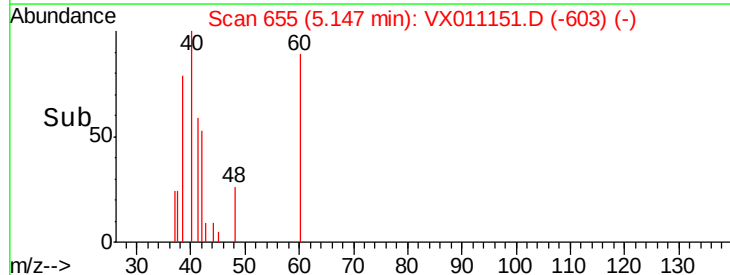
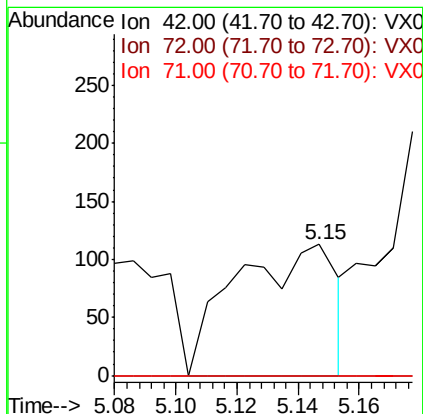
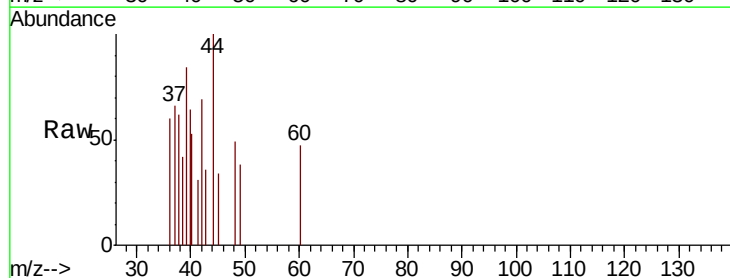
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 115.3 | 0.0   | 269.0 |
| 98      | 64.2  | 0.0   | 131.4 |

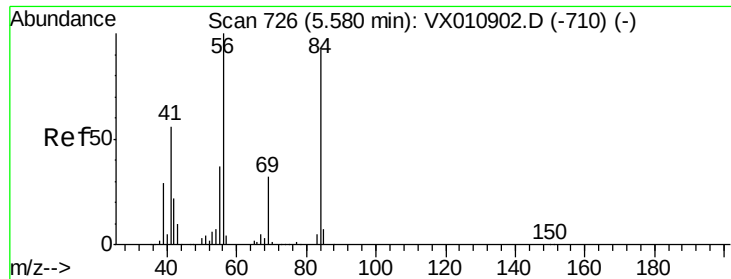


#29

Tetrahydrofuran  
 Concen: 0.311 ug/l  
 RT: 5.15 min Scan# 655  
 Delta R.T. 0.02 min  
 Lab File: VX011151.D  
 Acq: 29 Jul 2019 17:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 0.0   | 39.8  | 59.8# |
| 71      | 0.0   | 37.0  | 55.4# |

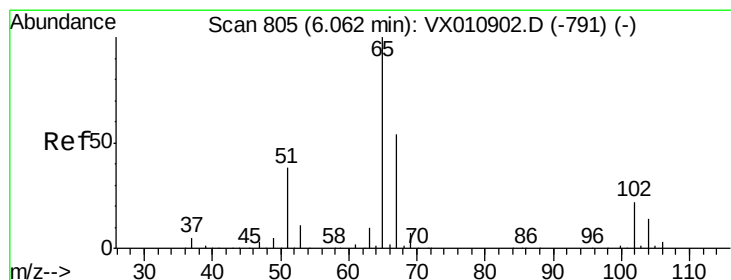
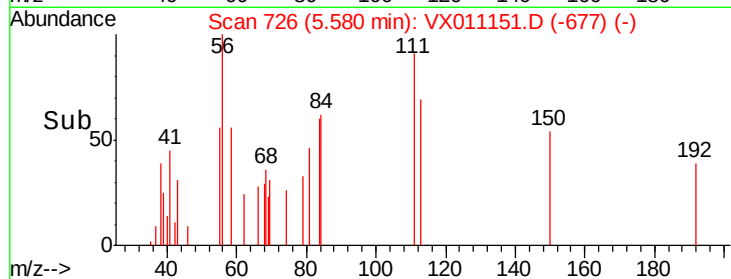
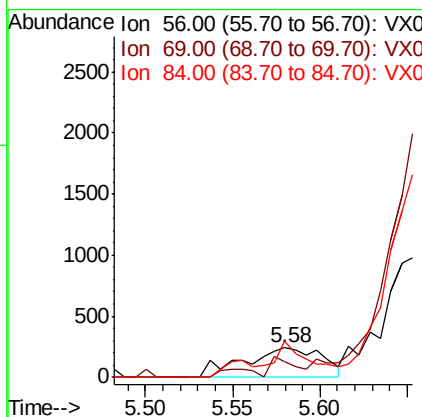
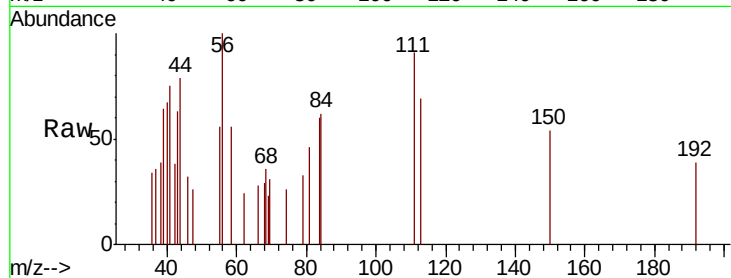




#31  
Cyclohexane  
Concen: 0.278 ug/l  
RT: 5.58 min Scan# 726  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

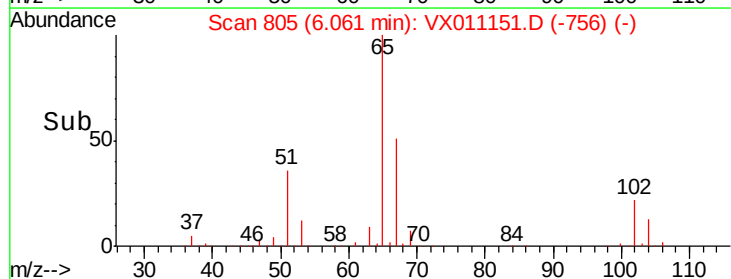
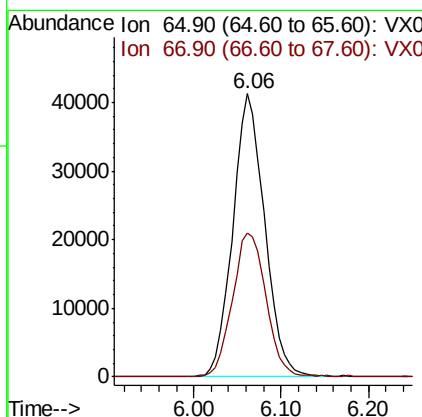
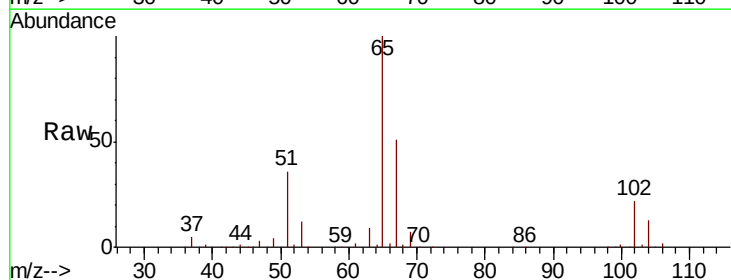
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0675

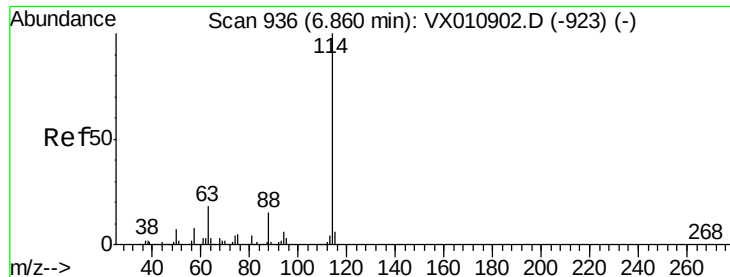
Tot Ion: 56 Resp: 761  
Ion Ratio Lower Upper  
56 100  
69 53.1 25.8 38.8#  
84 122.2 73.8 110.6#



#33  
1,2-Dichloroethane-d4  
Concen: 51.910 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

Tgt Ion: 65 Resp: 104698  
Ion Ratio Lower Upper  
65 100  
67 53.5 0.0 107.8

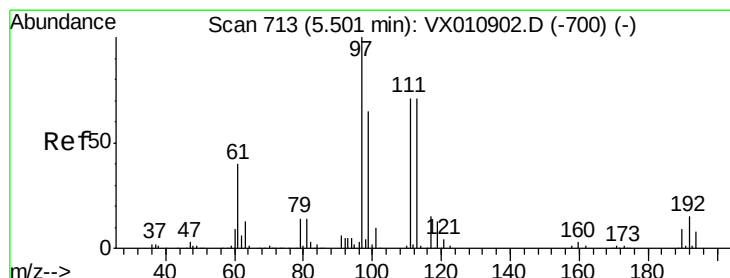
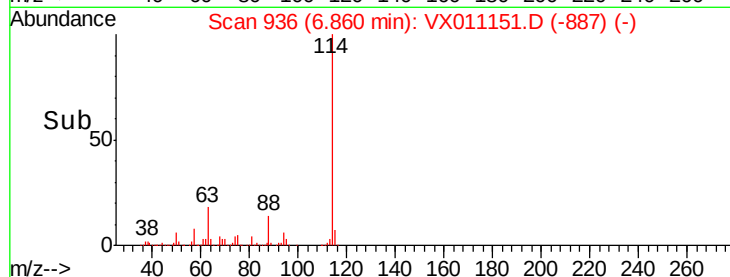
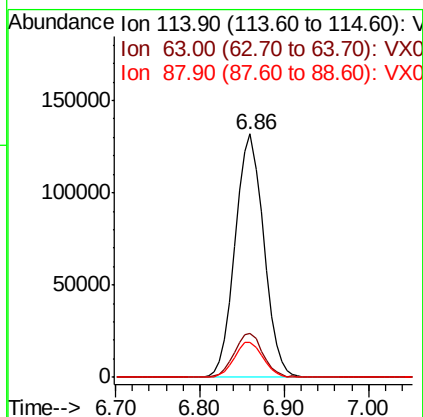
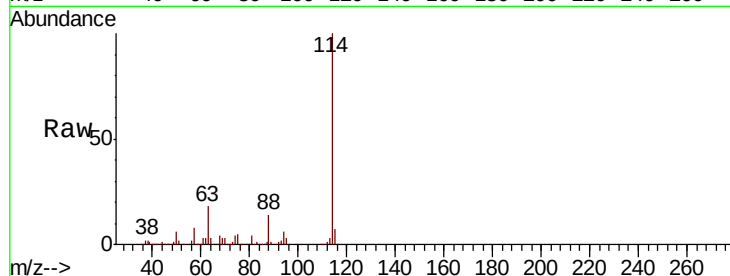




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.86 min Scan# 936  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

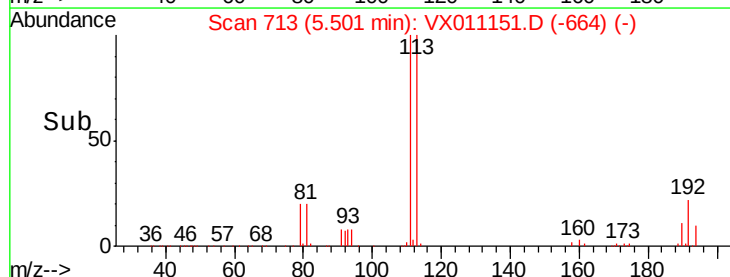
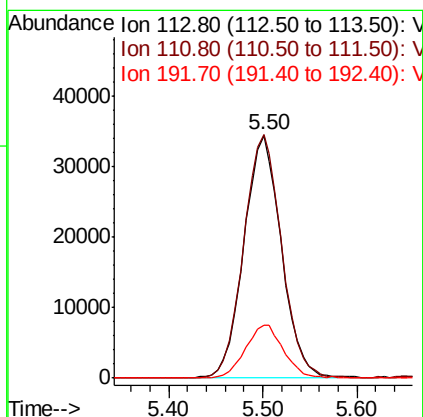
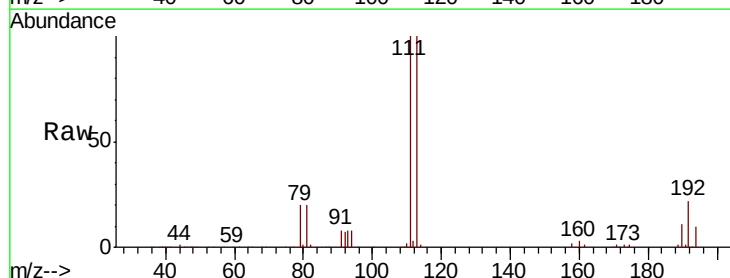
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0675

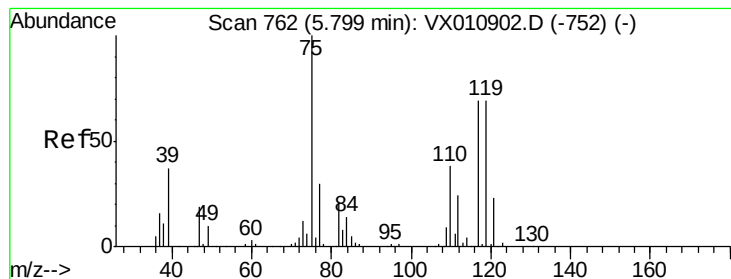
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 18.0  | 0.0   | 35.6  |
| 88      | 14.5  | 0.0   | 29.8  |



#35  
Dibromofluoromethane  
Concen: 49.763 ug/l  
RT: 5.50 min Scan# 713  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.0 | 82.3  | 123.5 |
| 192     | 22.4  | 17.4  | 26.2  |





#36

1,1-Dichloropropene

Concen: 5.168 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

Instrument :

MSVOA\_X

ClientSampleId :

Z3-0675

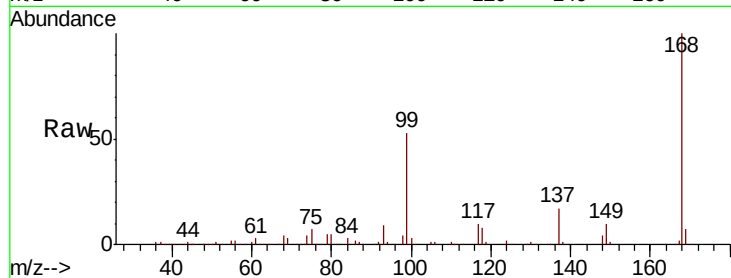
Tot Ion: 75 Resp: 12848

Ion Ratio Lower Upper

75 100

110 10.9 19.9 59.7#

77 0.7 25.0 37.4#



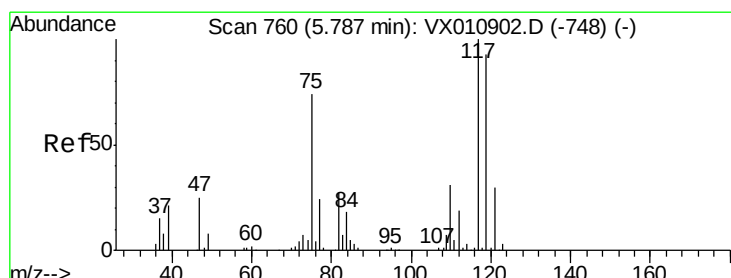
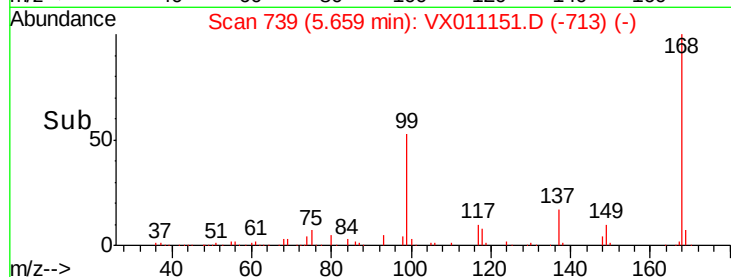
Abundance Ion 74.90 (74.60 to 75.60): VX010902.D (-752) (-)

Ion 109.90 (109.60 to 110.60): VX010902.D (-752) (-)

Ion 76.90 (76.60 to 77.60): VX010902.D (-752) (-)

5.66

Time-->



#38

Carbon Tetrachloride

Concen: 6.751 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.13 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

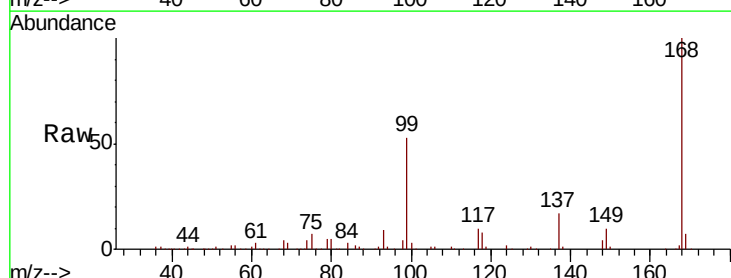
Tgt Ion: 117 Resp: 17489

Ion Ratio Lower Upper

117 100

119 5.6 74.2 111.2#

121 0.0 24.2 36.2#



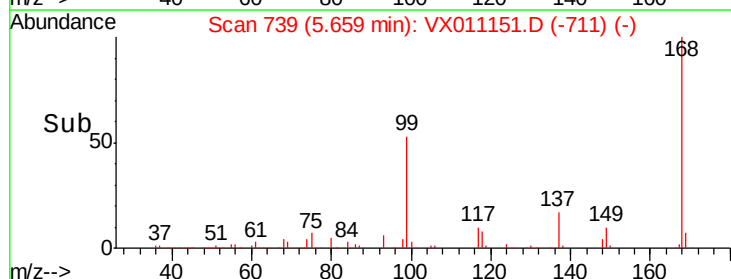
Abundance Ion 116.80 (116.50 to 117.50): VX010902.D (-748) (-)

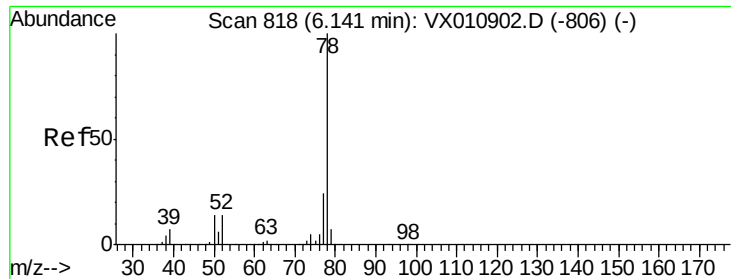
Ion 118.80 (118.50 to 119.50): VX010902.D (-748) (-)

Ion 120.80 (120.50 to 121.50): VX010902.D (-748) (-)

5.66

Time-->





#40

Benzene

Concen: 1.860 ug/l

RT: 6.14 min Scan# 818

Delta R.T. -0.00 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

Instrument :

MSVOA\_X

ClientSampleId :

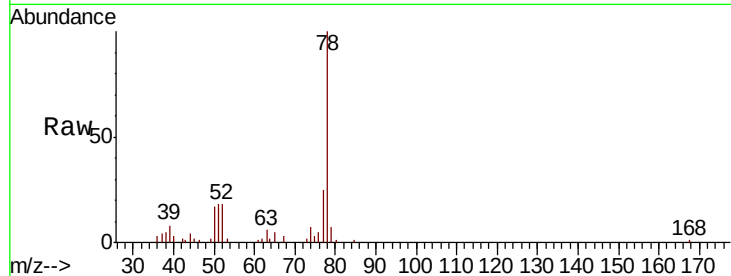
Z3-0675

Tot Ion: 78 Resp: 14162

Ion Ratio Lower Upper

78 100

77 23.6 19.0 28.6



Abundance Ion 78.00 (77.70 to 78.70): VX0

Ion 77.00 (76.70 to 77.70): VX0

6.14

5000

4000

3000

2000

1000

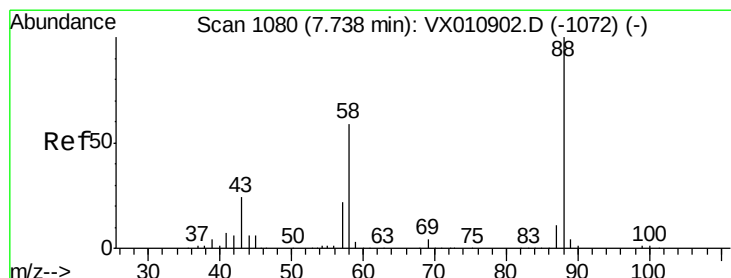
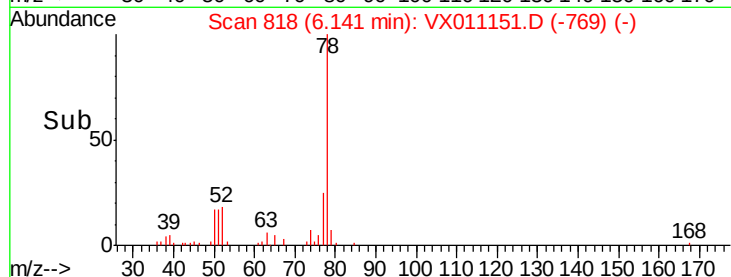
0

Time-->

6.00

6.10

6.20



#49

1,4-Dioxane

Concen: 0.333 ug/l

RT: 7.86 min Scan# 1100

Delta R.T. 0.12 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

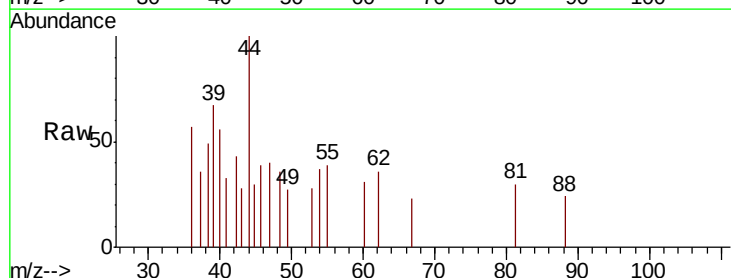
Tgt Ion: 88 Resp: 19

Ion Ratio Lower Upper

88 100

43 0.0 22.9 34.3#

58 121.1 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

150

100

50

0

Time-->

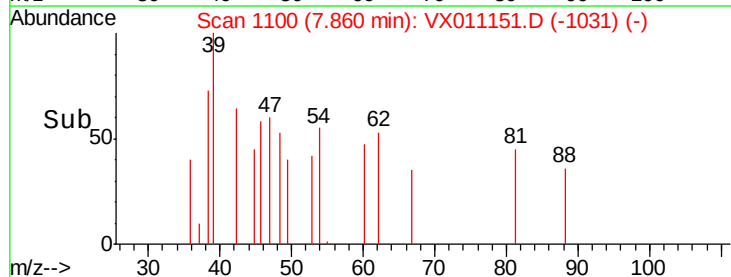
7.84

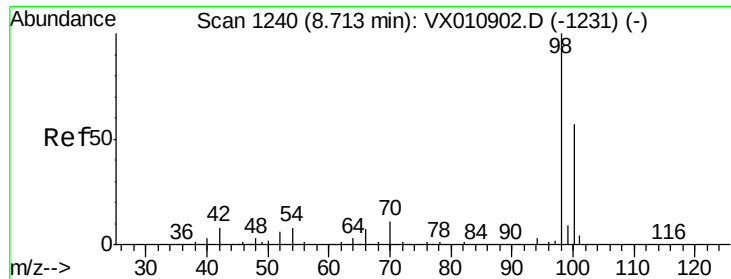
7.85

7.86

7.87

7.88

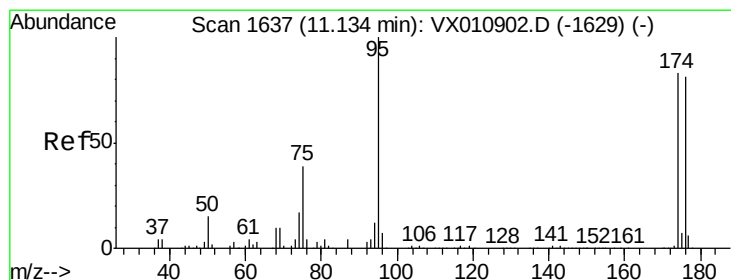
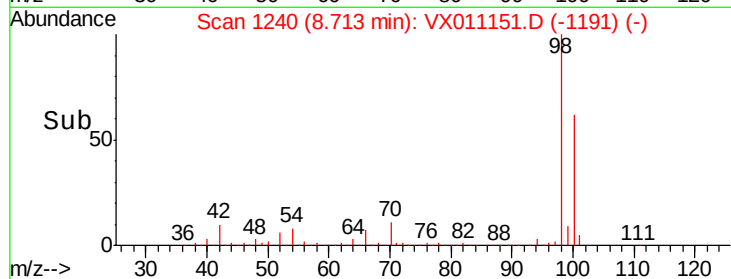
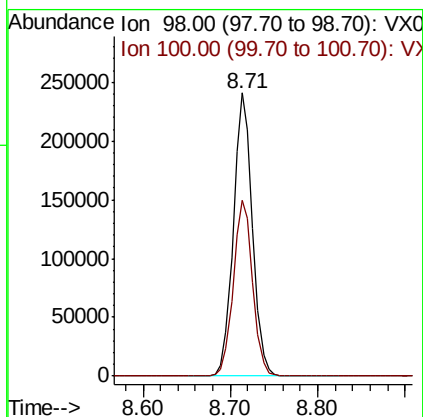
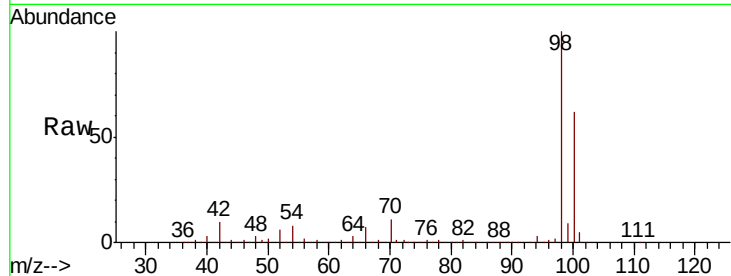




#50  
Toluene-d8  
Concen: 50.872 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

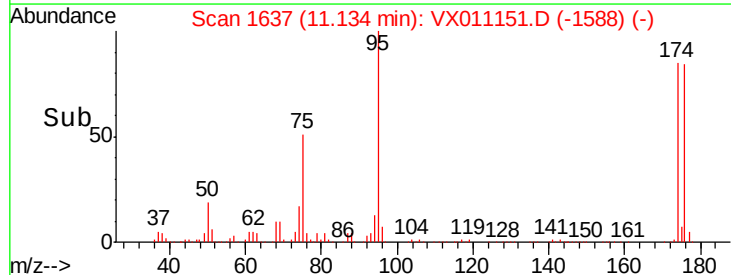
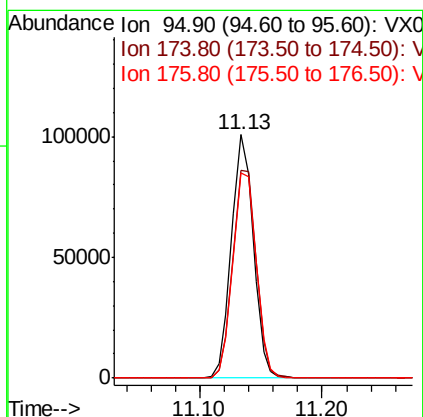
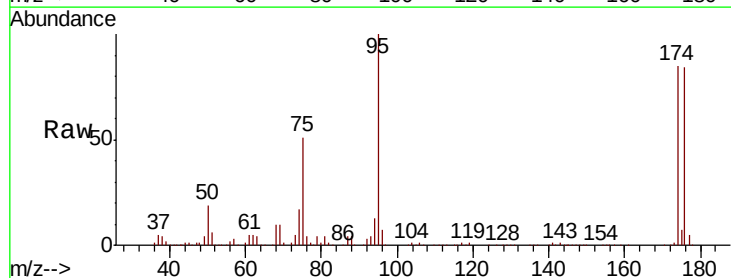
Instrument :  
MSVOA\_X  
ClientSampled :  
Z3-0675

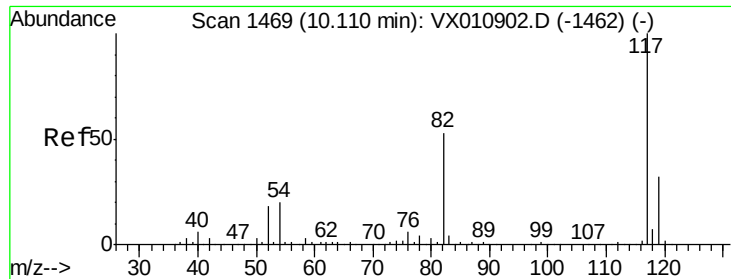
Tot Ion: 98 Resp: 366555  
Ion Ratio Lower Upper  
98 100  
100 63.0 50.6 75.8



#62  
4-Bromofluorobenzene  
Concen: 47.337 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

Tgt Ion: 95 Resp: 125372  
Ion Ratio Lower Upper  
95 100  
174 91.3 0.0 180.6  
176 90.0 0.0 173.8

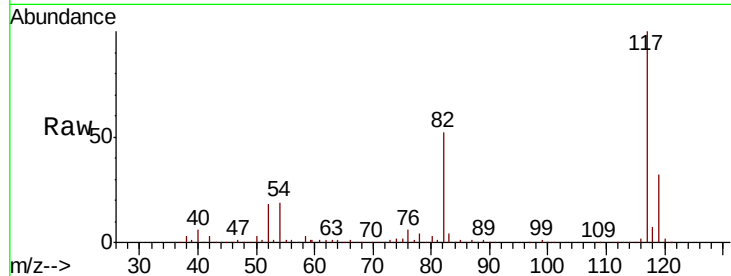




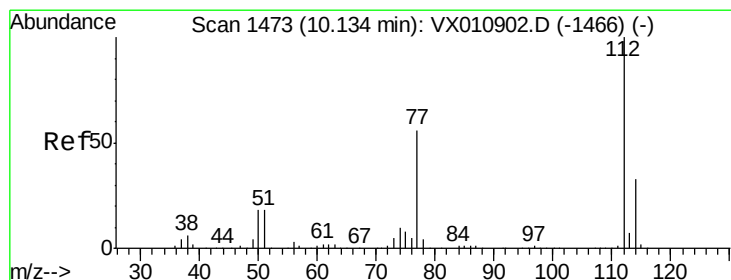
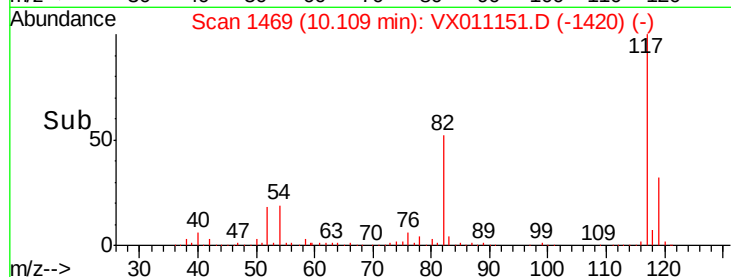
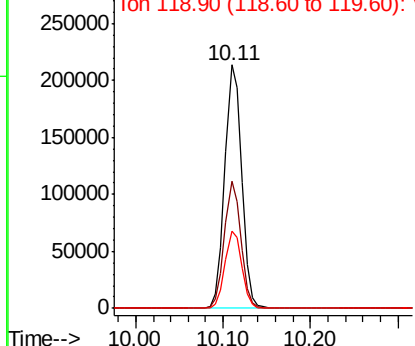
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0675

Tot Ion:117 Resp: 284408  
Ion Ratio Lower Upper  
117 100  
82 52.0 42.6 63.8  
119 31.9 25.9 38.9

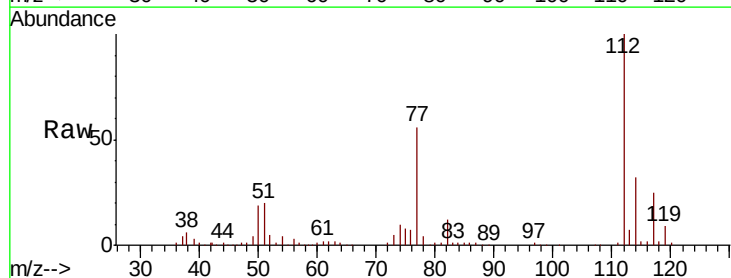


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

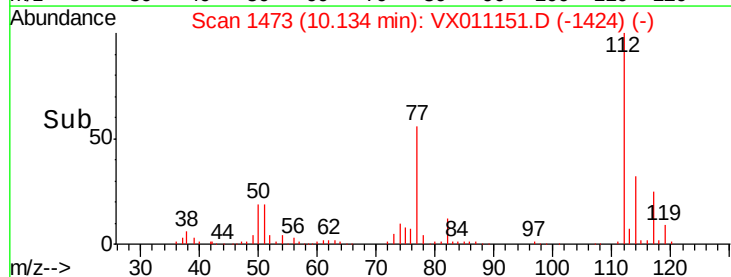
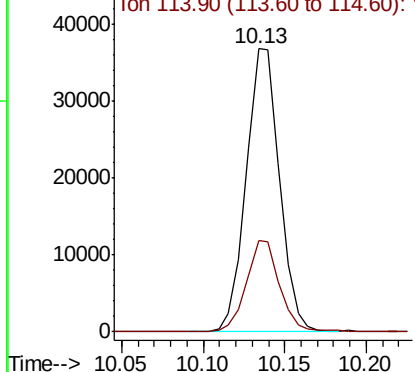


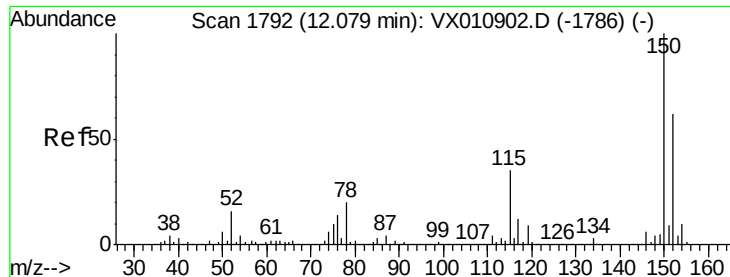
#65  
Chlorobenzene  
Concen: 9.011 ug/l  
RT: 10.13 min Scan# 1473  
Delta R.T. -0.00 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

Tgt Ion:112 Resp: 52636  
Ion Ratio Lower Upper  
112 100  
114 32.3 26.2 39.4



Abundance Ion 111.90 (111.60 to 112.60): V  
Ion 113.90 (113.60 to 114.60): V



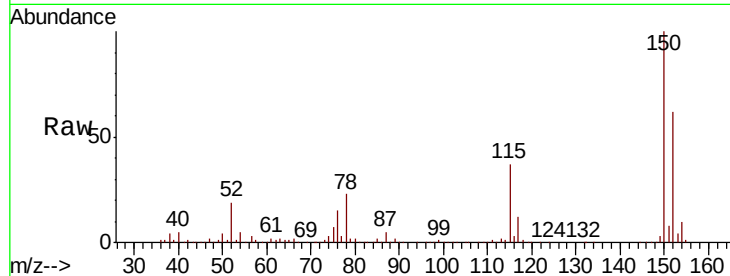


#72

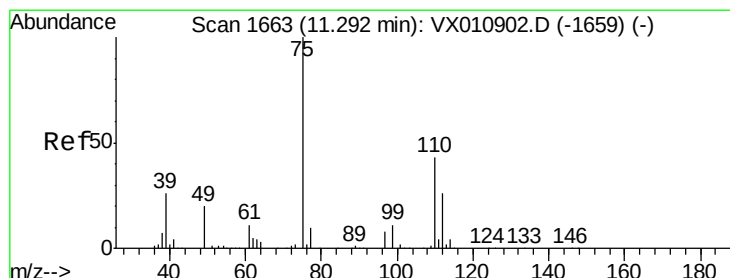
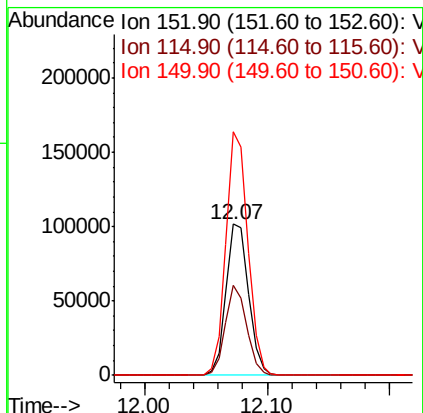
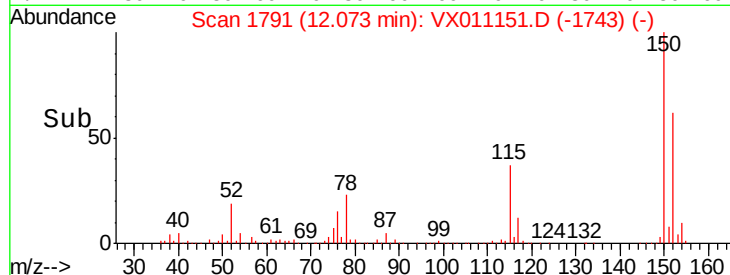
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1791  
Delta R.T. -0.01 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-0675

Tot Ion:152 Resp: 129471  
Ion Ratio Lower Upper  
152 100  
115 56.3 39.7 119.1  
150 156.4 0.0 345.6



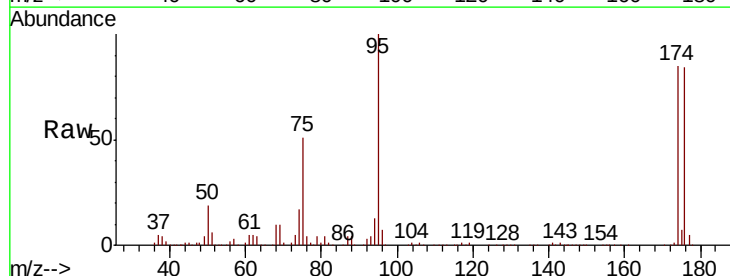
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



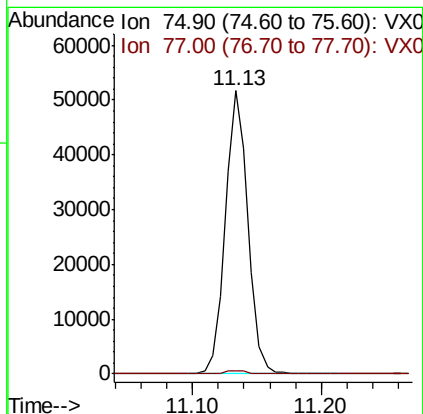
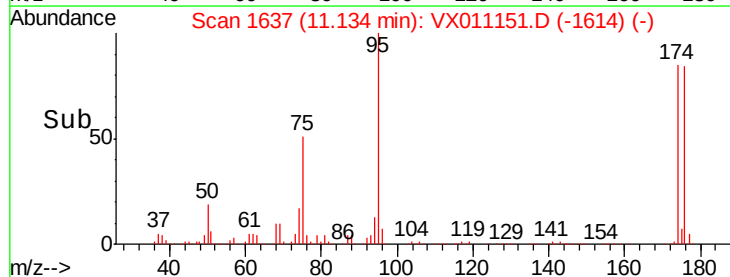
#76

1,2,3-Trichloropropane  
Concen: 27.220 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.16 min  
Lab File: VX011151.D  
Acq: 29 Jul 2019 17:22

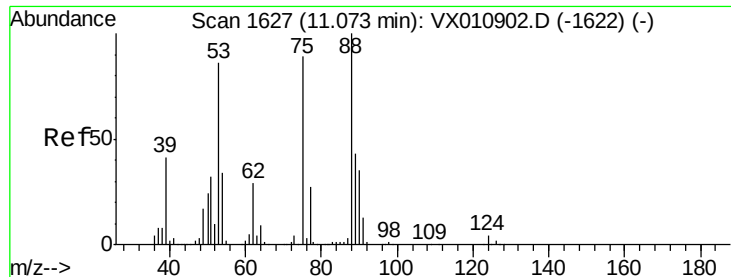
Tgt Ion: 75 Resp: 63596  
Ion Ratio Lower Upper  
75 100  
77 1.3 21.3 64.0#



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: 67.454 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011151.D

Acq: 29 Jul 2019 17:22

Instrument :

MSVOA\_X

ClientSampleId :

Z3-0675

Tot Ion: 75 Resp: 63596

Ion Ratio Lower Upper

75 100

53 0.1 76.7 115.1#

89 0.1 38.5 57.7#

