

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX121818\  
 Data File : VX006615.D  
 Acq On : 18 Dec 2018 23:51  
 Operator : JC/MD  
 Sample : J6405-12DL 50X  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP04-20181210DL

Quant Time: Dec 19 06:05:22 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 18 13:23:17 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 672283   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 1054491  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 962749   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 461588   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response   | Conc    | Units | Dev(Min) |
|-----------------------------|-------|------|------------|---------|-------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 364512     | 50.31   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 100.62% |       |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 312593     | 46.88   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 93.76%  |       |          |
| 50) Toluene-d8              | 8.71  | 98   | 1246127    | 49.57   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 99.14%  |       |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 457201     | 49.66   | ug/l  | 0.00     |
| Spiked Amount 50.000        |       |      | Recovery = | 99.32%  |       |          |

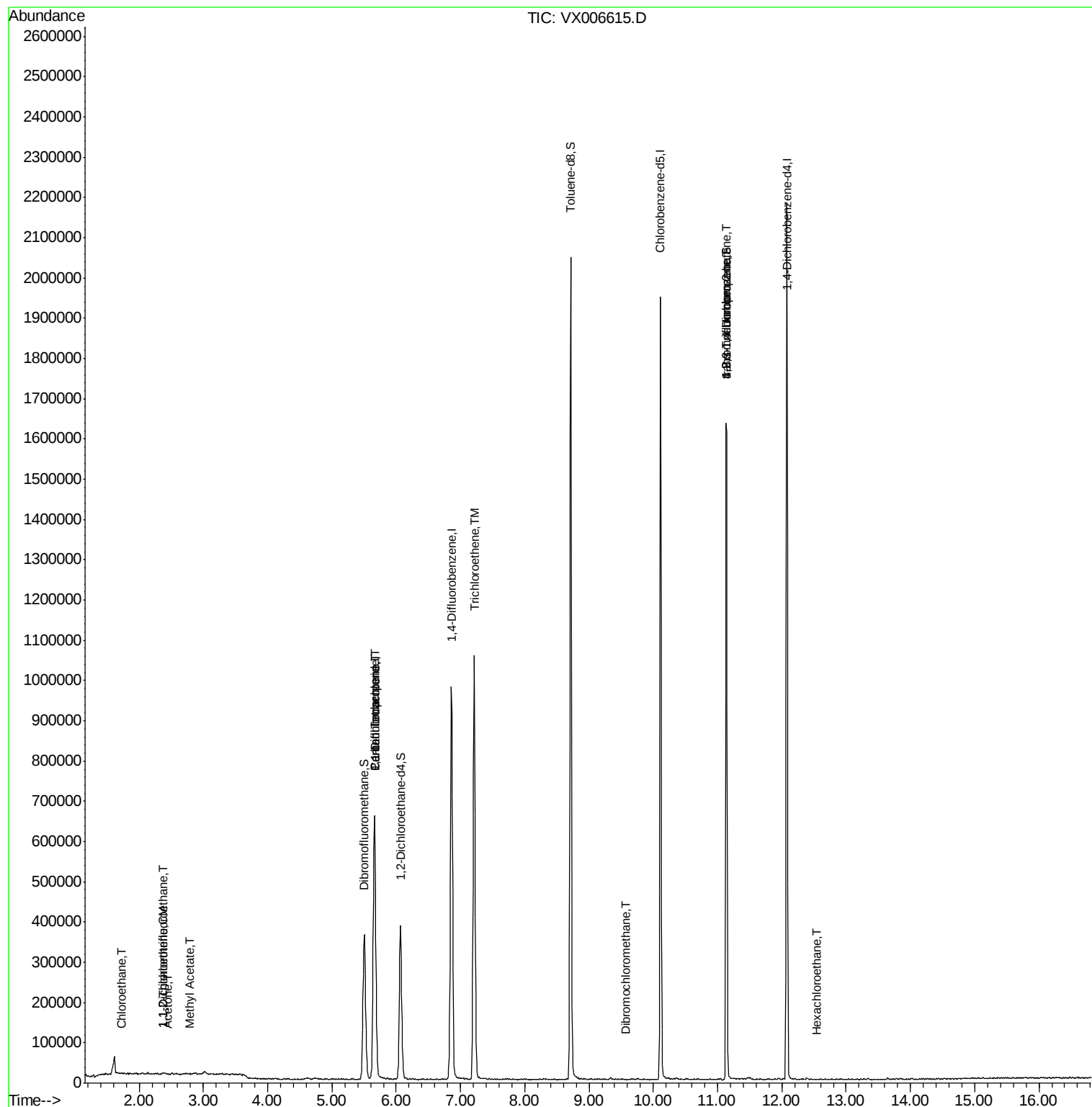
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.65  | 94   | 1561     | Below Cal | #      | 75     |
| 6) Chloroethane                | 1.73  | 64   | 986      | 0.206     | ug/l # | 47     |
| 9) 1,1,2-Trichlorotrifluoroet  | 2.39  | 101  | 1368     | 0.216     | ug/l # | 87     |
| 12) 1,1-Dichloroethene         | 2.37  | 96   | 1674     | 0.279     | ug/l # | 36     |
| 16) Acetone                    | 2.45  | 43   | 980      | 0.294     | ug/l # | 63     |
| 18) Methyl Acetate             | 2.79  | 43   | 2201     | 0.225     | ug/l # | 66     |
| 28) Bromochloromethane         | 5.03  | 49   | 363      | Below Cal | #      | 3      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 44313    | 5.074     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 62935    | 7.415     | ug/l # | 16     |
| 44) Trichloroethene            | 7.21  | 130  | 417591   | 51.971    | ug/l   | 95     |
| 49) 1,4-Dioxane                | 7.75  | 88   | 302      | Below Cal | #      | 56     |
| 60) Dibromochloromethane       | 9.57  | 129  | 67       | 2.333     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 210053   | 25.964    | ug/l # | 38     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 210053   | 72.444    | ug/l # | 15     |
| 90) Hexachloroethane           | 12.55 | 117  | 34       | 3.300     | ug/l   | 71     |

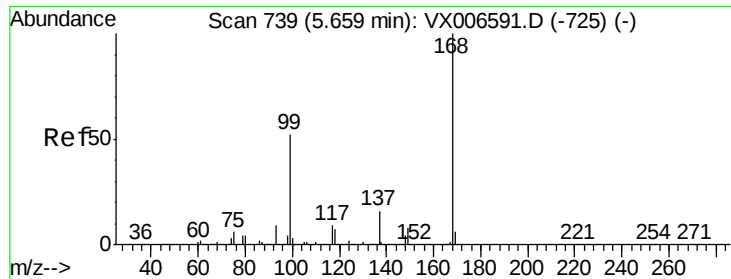
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX121818\  
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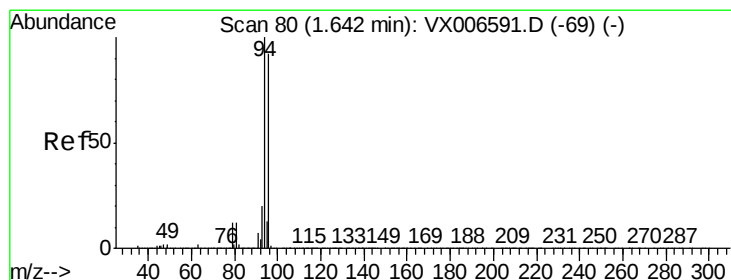
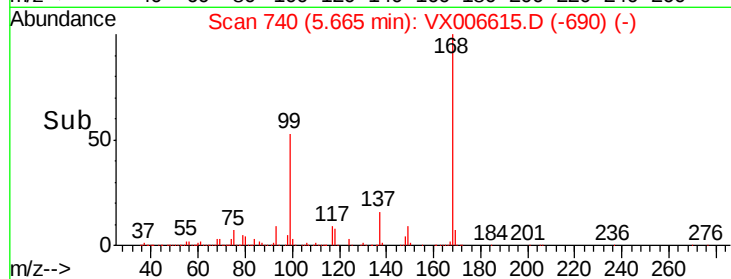
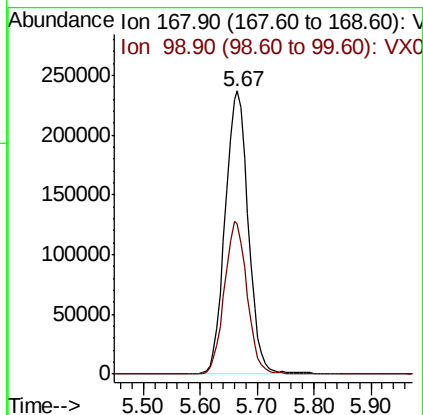
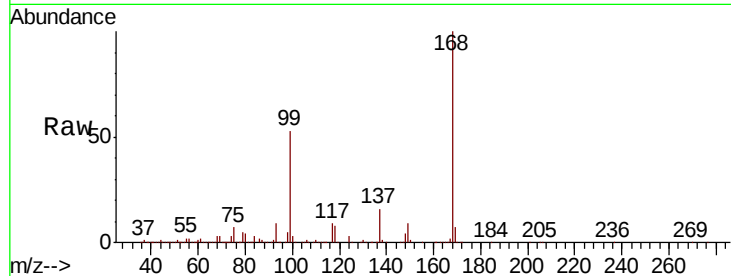


#1

Pentafluorobenzene  
 Concen: 50.000 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. 0.01 min  
 Lab File: VX006615.D  
 Acq: 18 Dec 2018 23:51

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 DUP04-20181210DL

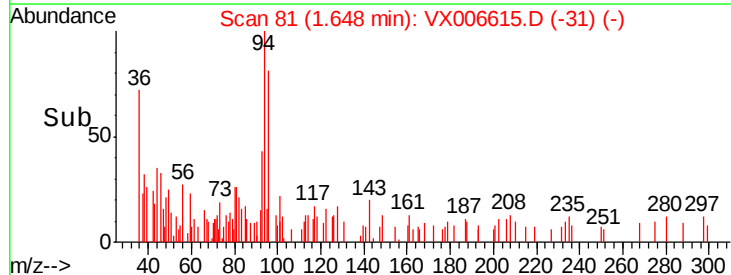
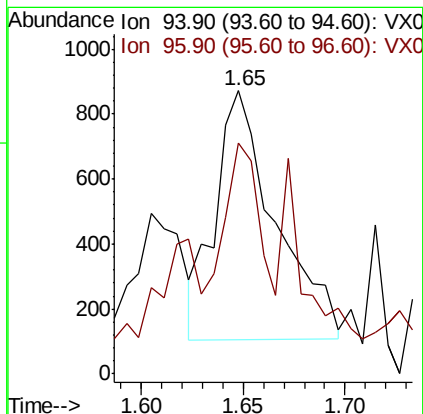
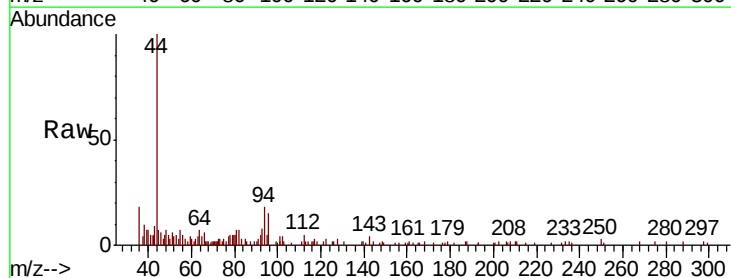
Tot Ion:168 Resp: 672283  
 Ion Ratio Lower Upper  
 168 100  
 99 53.1 37.8 56.8

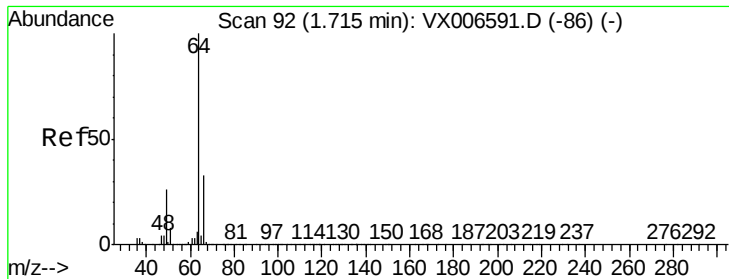


#5

Bromomethane  
 Concen: Below Cal  
 RT: 1.65 min Scan# 81  
 Delta R.T. 0.01 min  
 Lab File: VX006615.D  
 Acq: 18 Dec 2018 23:51

Tgt Ion: 94 Resp: 1561  
 Ion Ratio Lower Upper  
 94 100  
 96 68.8 74.5 111.7#





#6

Chloroethane

Concen: 0.206 ug/l

RT: 1.73 min Scan# 94

Delta R.T. 0.01 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleID :

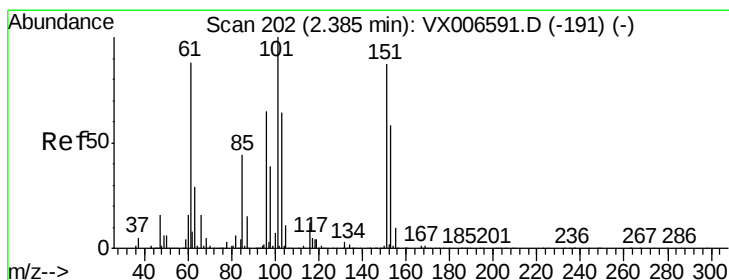
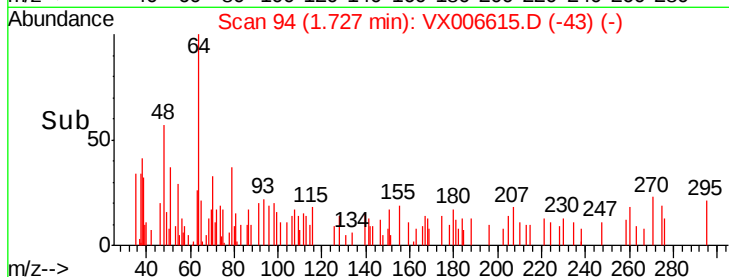
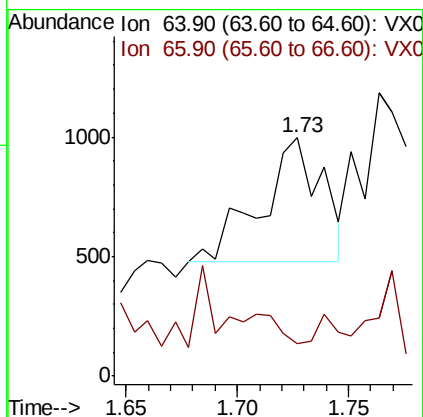
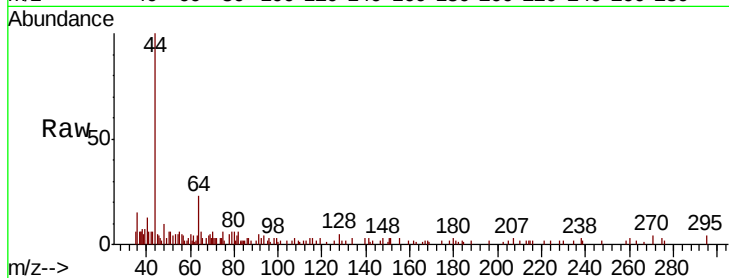
DUP04-20181210DL

Tot Ion: 64 Resp: 986

Ion Ratio Lower Upper

64 100

66 2.9 25.9 38.9#



#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.216 ug/l

RT: 2.39 min Scan# 202

Delta R.T. 0.00 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

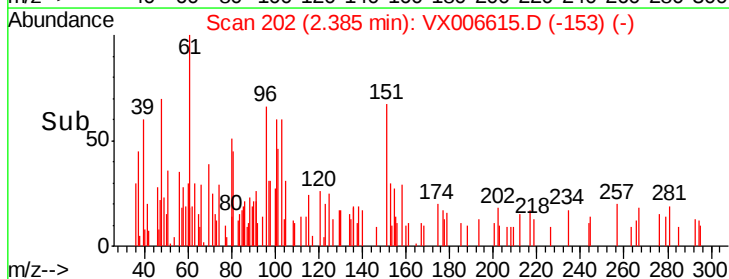
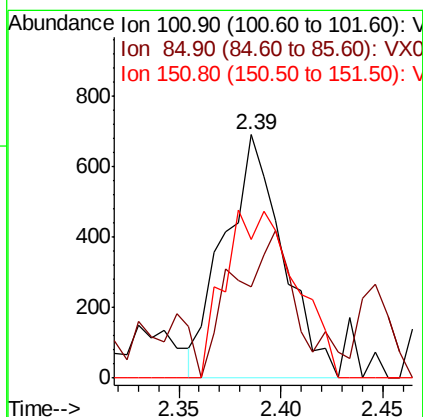
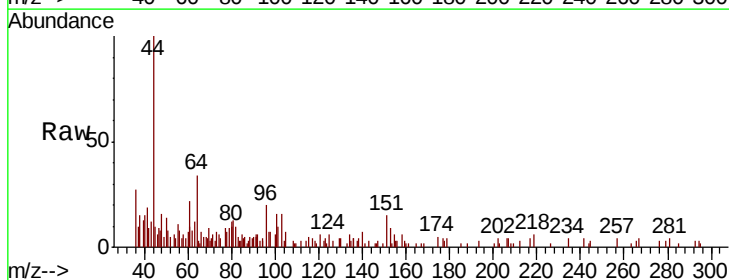
Tgt Ion: 101 Resp: 1368

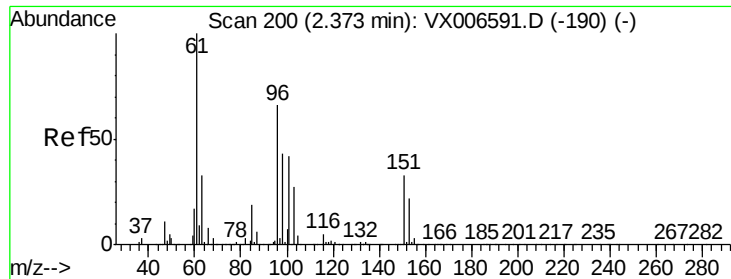
Ion Ratio Lower Upper

101 100

85 67.0 35.5 53.3#

151 84.4 68.6 103.0





#12

1,1-Dichloroethene

Concen: 0.279 ug/l

RT: 2.37 min Scan# 200

Delta R.T. 0.00 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

DUP04-20181210DL

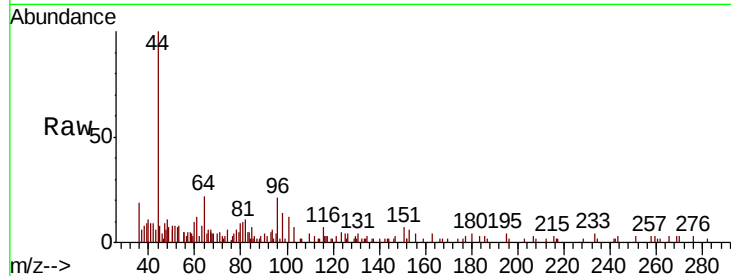
Tot Ion: 96 Resp: 1674

Ion Ratio Lower Upper

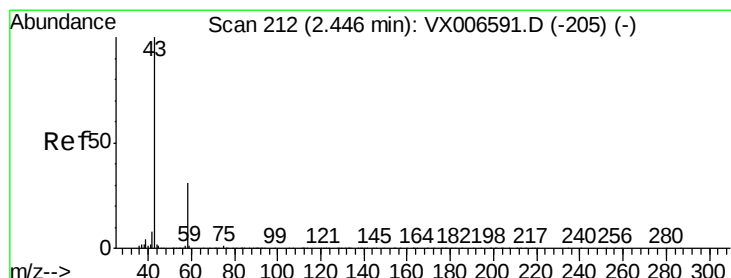
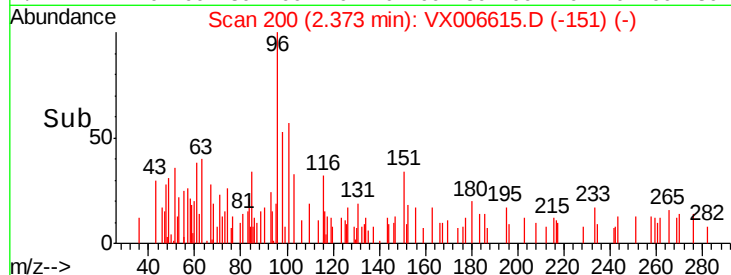
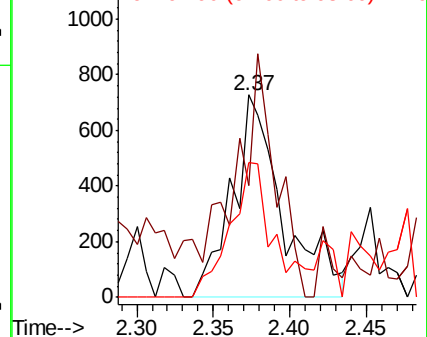
96 100

61 45.7 131.7 197.5#

98 66.4 51.8 77.6



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



#16

Acetone

Concen: 0.294 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX006615.D

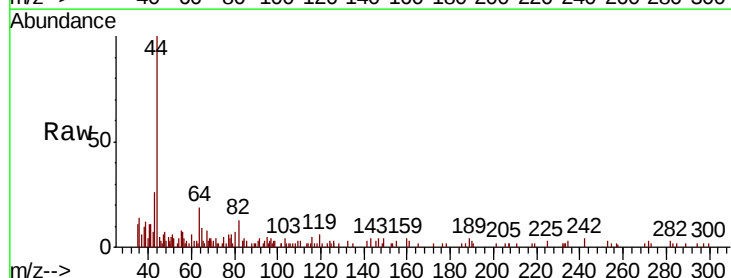
Acq: 18 Dec 2018 23:51

Tgt Ion: 43 Resp: 980

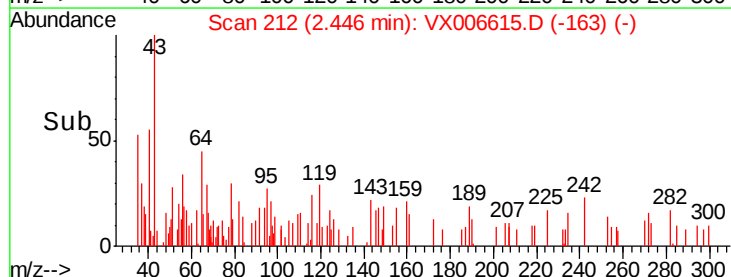
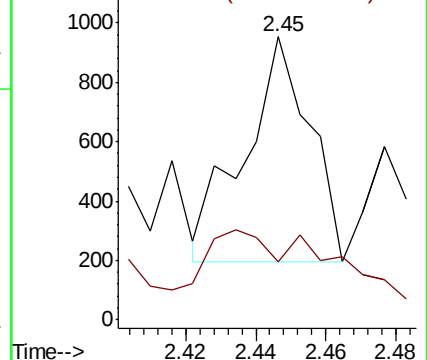
Ion Ratio Lower Upper

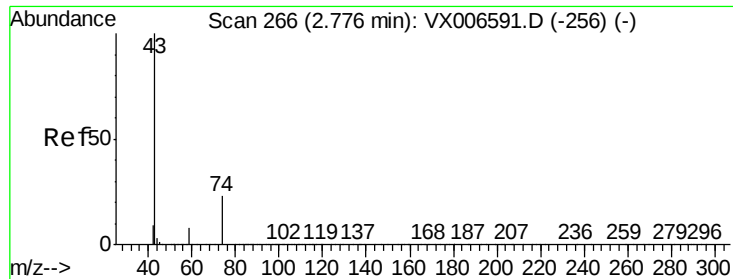
43 100

58 9.9 24.0 36.0#



Abundance Ion 43.00 (42.70 to 43.70): VX0  
Ion 58.00 (57.70 to 58.70): VX0

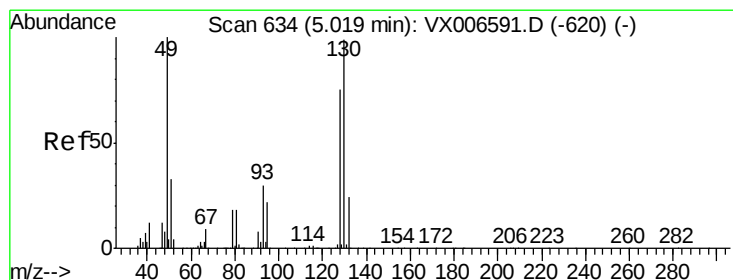
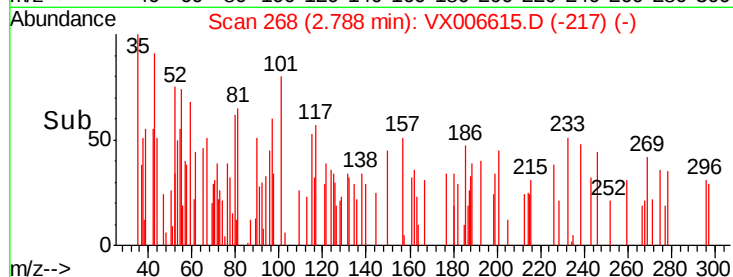
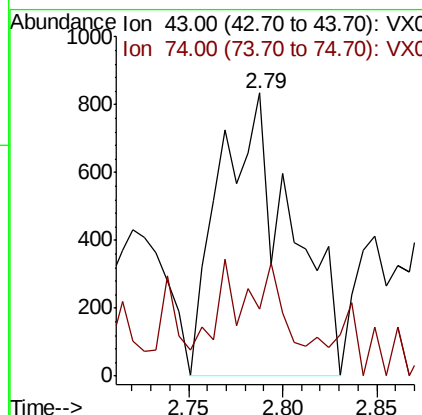
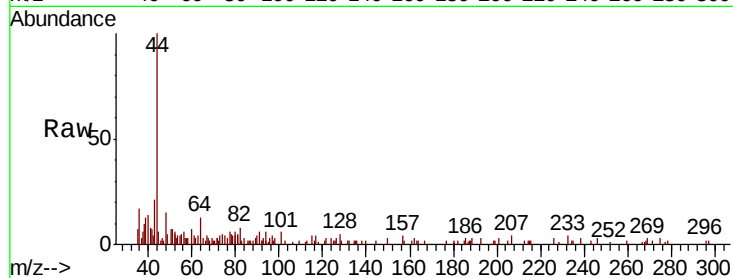




#18  
Methyl Acetate  
Concen: 0.225 ug/l  
RT: 2.79 min Scan# 268  
Delta R.T. 0.01 min  
Lab File: VX006615.D  
Acq: 18 Dec 2018 23:51

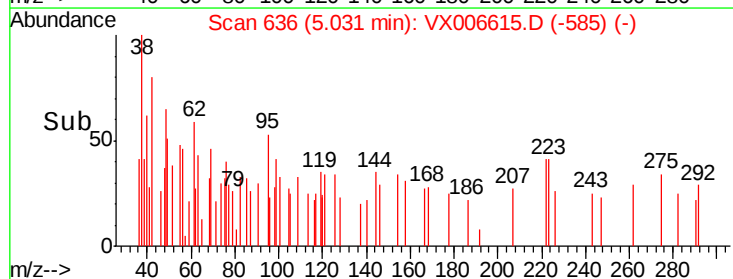
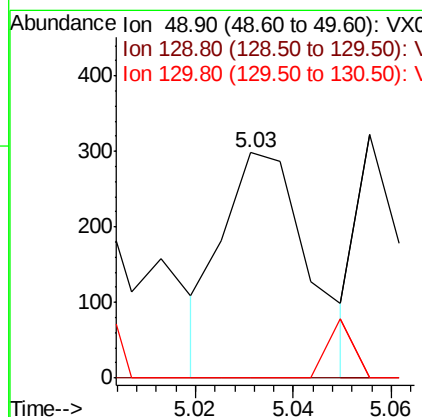
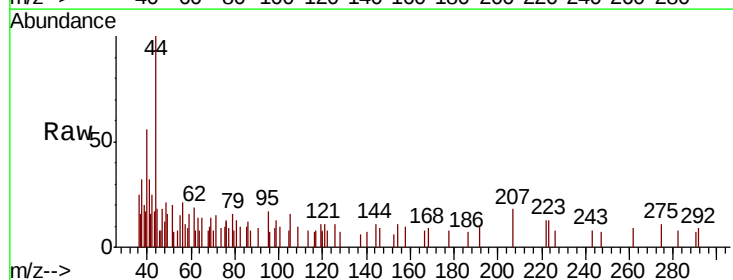
Instrument :  
MSVOA\_X  
ClientSampleID :  
DUP04-20181210DL

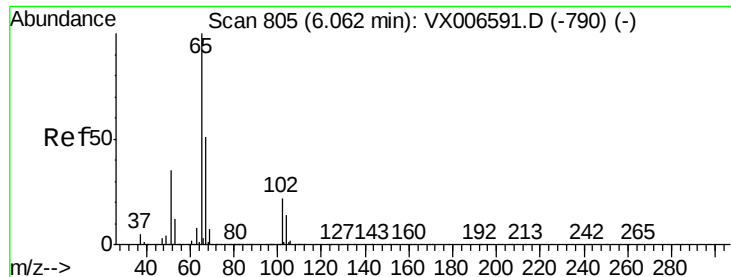
Tot Ion: 43 Resp: 2201  
Ion Ratio Lower Upper  
43 100  
74 6.0 17.9 26.9#



#28  
Bromochloromethane  
Concen: Below Cal  
RT: 5.03 min Scan# 636  
Delta R.T. 0.01 min  
Lab File: VX006615.D  
Acq: 18 Dec 2018 23:51

Tgt Ion: 49 Resp: 363  
Ion Ratio Lower Upper  
49 100  
129 0.0 0.0 5.0  
130 0.0 78.3 117.5#





#33

1,2-Dichloroethane-d4

Concen: 50.308 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.01 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

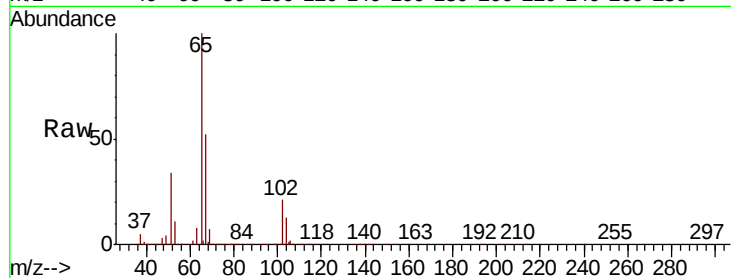
DUP04-20181210DL

Tot Ion: 65 Resp: 364512

Ion Ratio Lower Upper

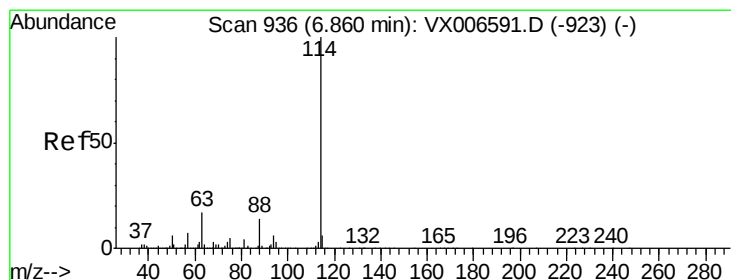
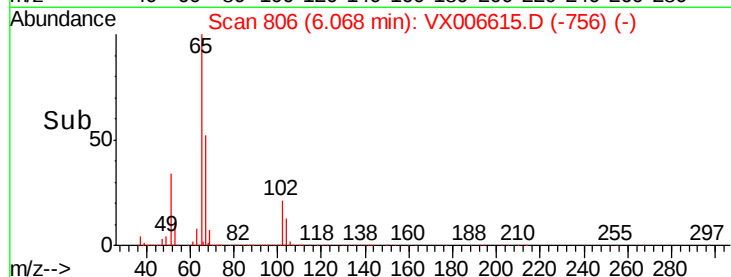
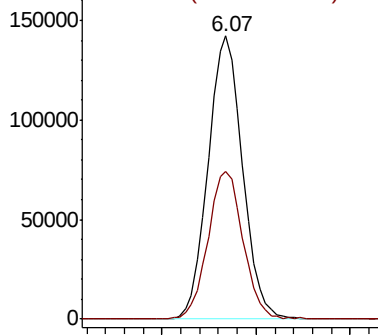
65 100

67 53.0 0.0 107.2



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: VX006615.D

Acq: 18 Dec 2018 23:51

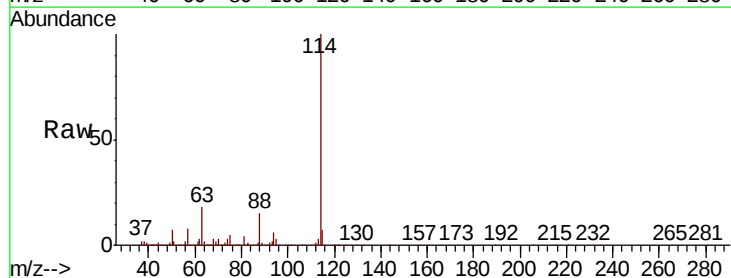
Tgt Ion: 114 Resp: 1054491

Ion Ratio Lower Upper

114 100

63 17.9 0.0 36.6

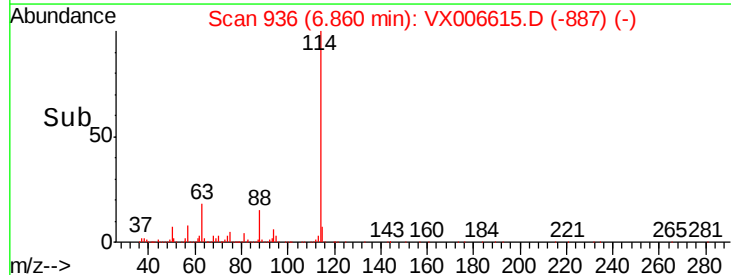
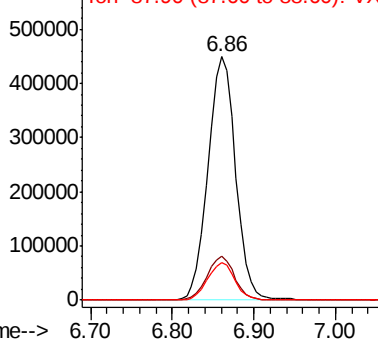
88 15.2 0.0 29.0

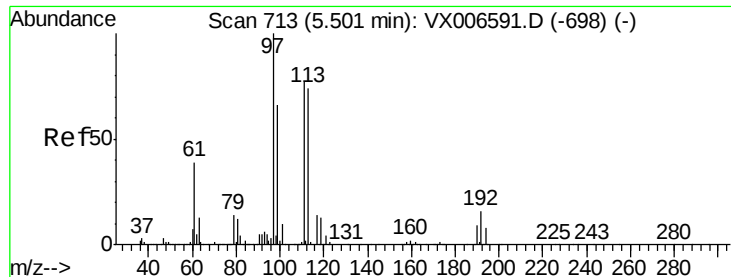


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 46.877 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

DUP04-20181210DL

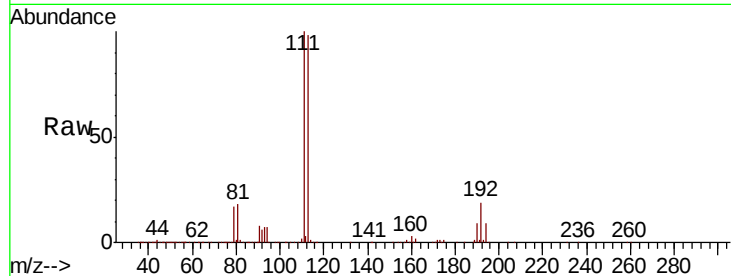
Tot Ion:113 Resp: 312593

Ion Ratio Lower Upper

113 100

111 102.6 81.1 121.7

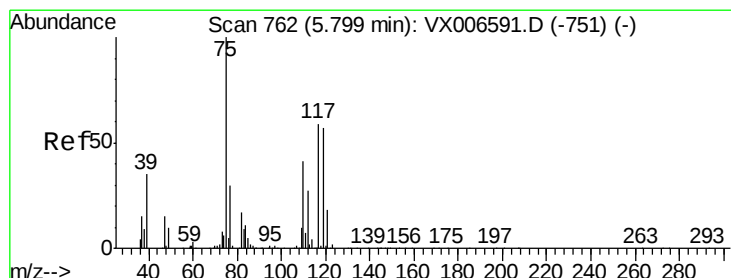
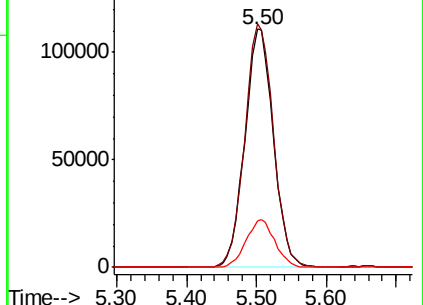
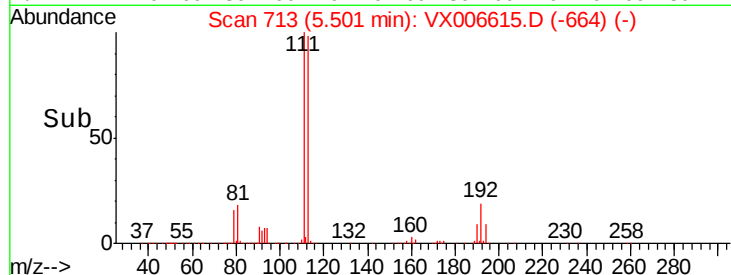
192 20.2 18.2 27.2



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 5.074 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

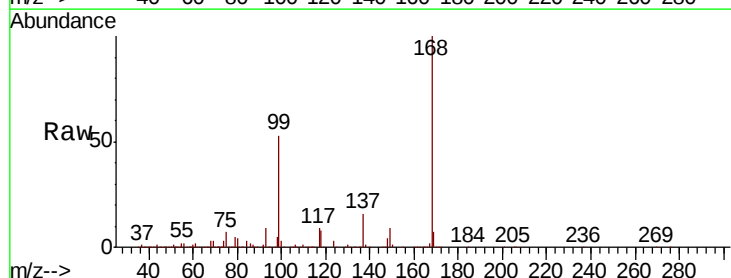
Tgt Ion: 75 Resp: 44313

Ion Ratio Lower Upper

75 100

110 10.1 20.4 61.3#

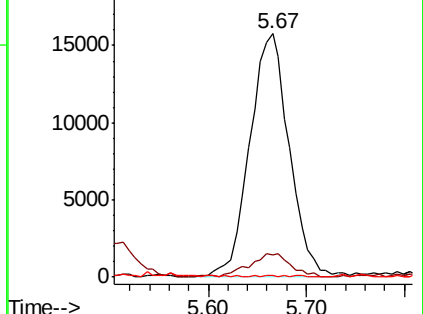
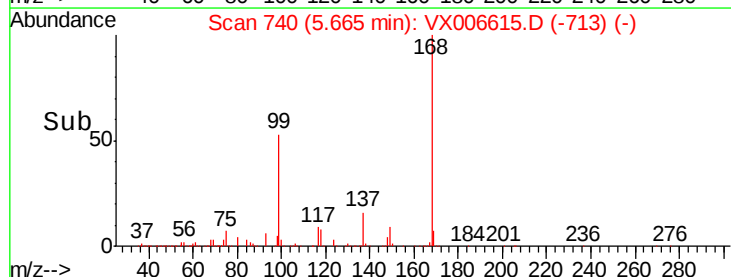
77 0.5 24.9 37.3#

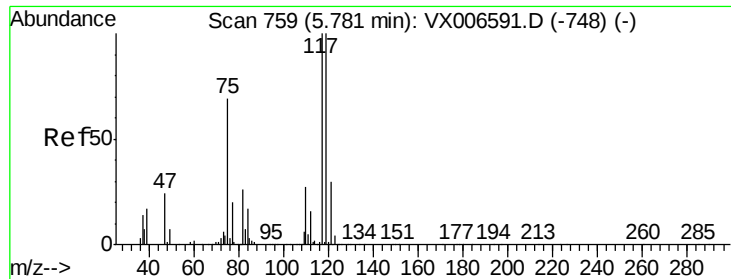


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 7.415 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

DUP04-20181210DL

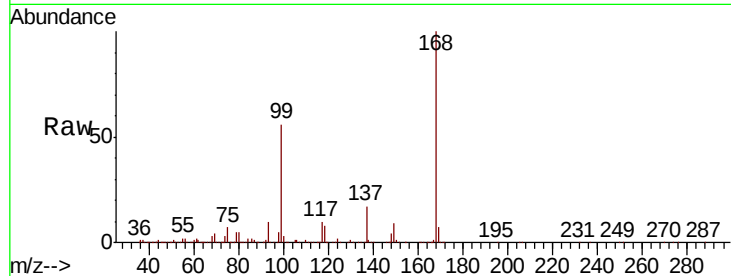
Tot Ion:117 Resp: 62935

Ion Ratio Lower Upper

117 100

119 4.9 75.8 113.8#

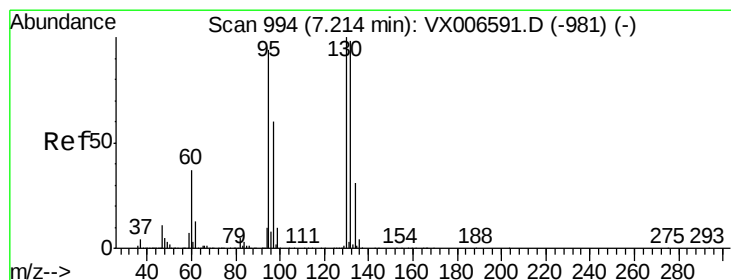
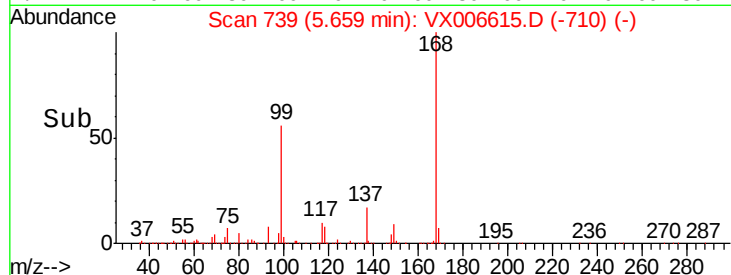
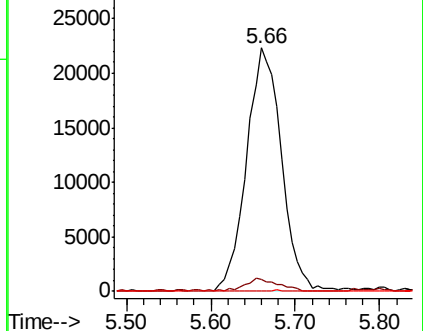
121 0.0 24.6 37.0#



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: 51.971 ug/l

RT: 7.21 min Scan# 994

Delta R.T. 0.00 min

Lab File: VX006615.D

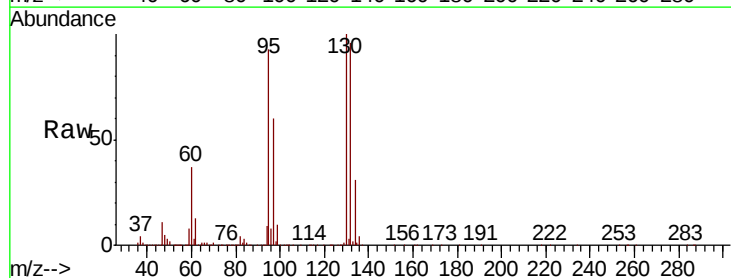
Acq: 18 Dec 2018 23:51

Tgt Ion:130 Resp: 417591

Ion Ratio Lower Upper

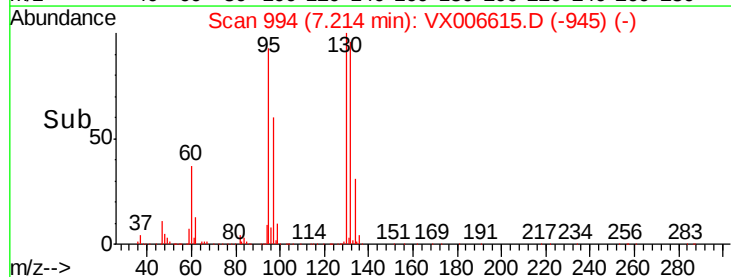
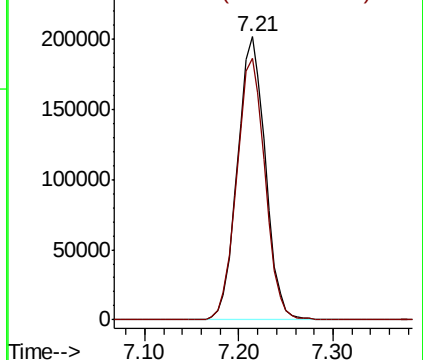
130 100

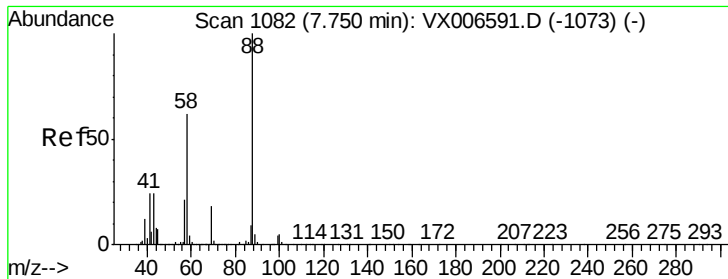
95 92.6 0.0 175.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0





#49

1,4-Dioxane

Concen: Below Cal

RT: 7.75 min Scan# 1082

Delta R.T. 0.00 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

DUP04-20181210DL

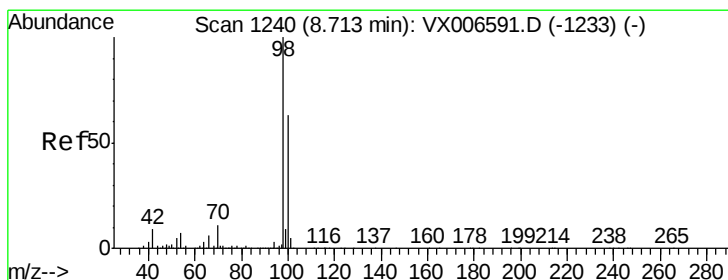
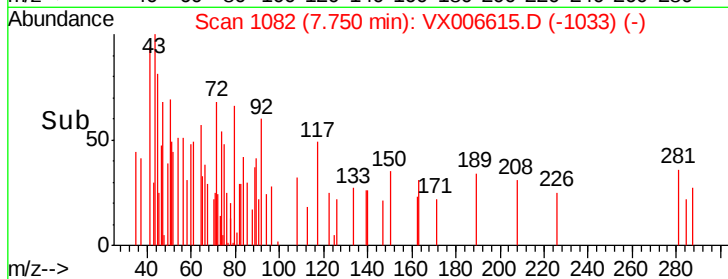
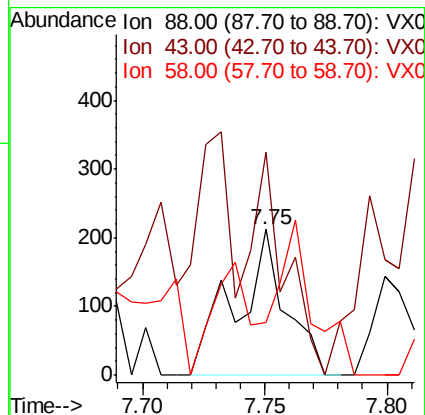
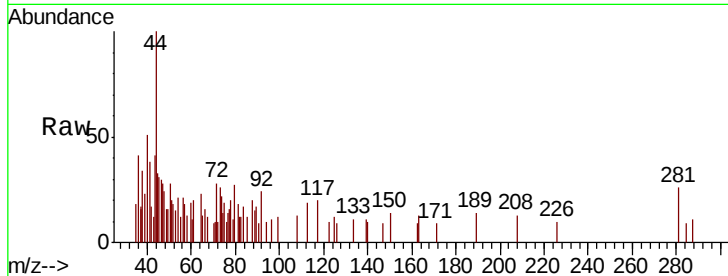
Tot Ion: 88 Resp: 302

Ion Ratio Lower Upper

88 100

43 81.1 23.2 34.8#

58 79.1 51.4 77.0#



#50

Toluene-d8

Concen: 49.567 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX006615.D

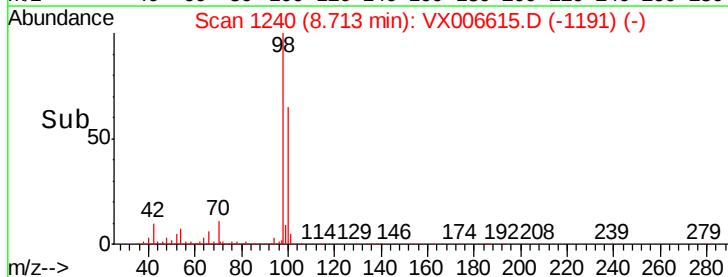
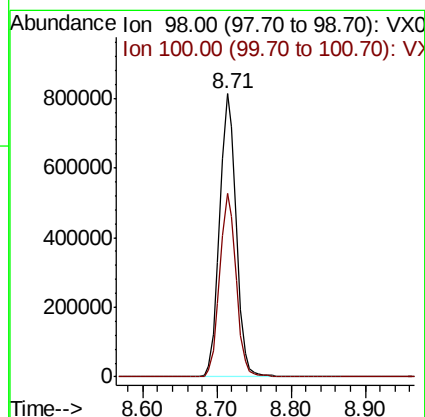
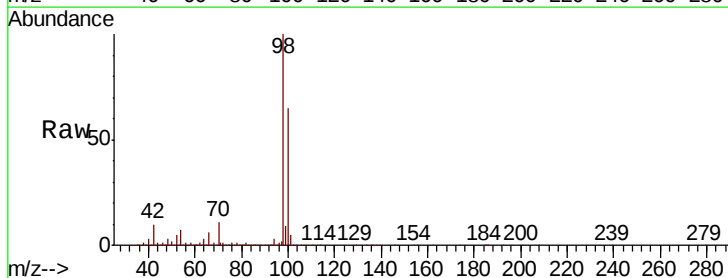
Acq: 18 Dec 2018 23:51

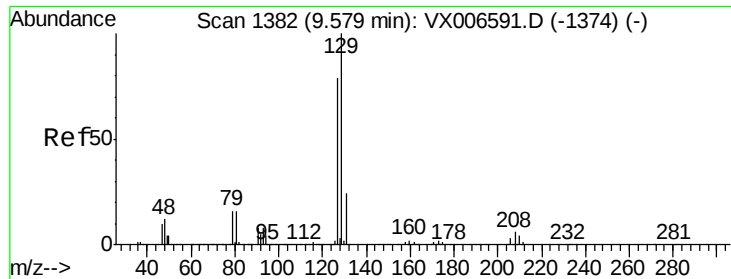
Tgt Ion: 98 Resp: 1246127

Ion Ratio Lower Upper

98 100

100 64.3 52.2 78.2





#60

Dibromochloromethane

Concen: 2.333 ug/l

RT: 9.57 min Scan# 1381

Delta R.T. -0.01 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

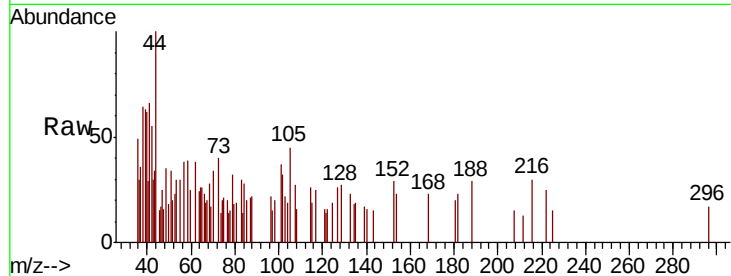
DUP04-20181210DL

Tot Ion:129 Resp: 67

Ion Ratio Lower Upper

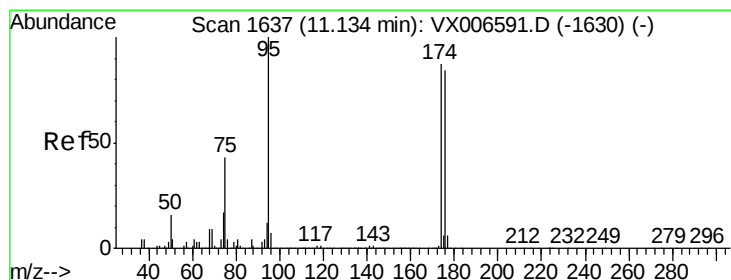
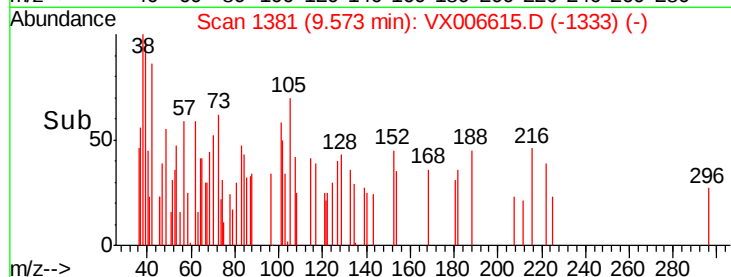
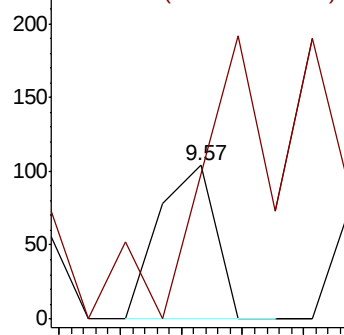
129 100

127 377.6 38.6 115.8#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 49.656 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

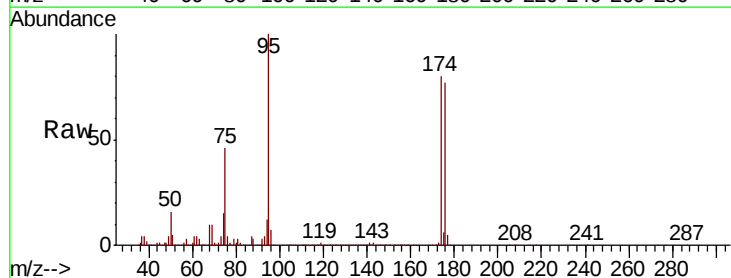
Tgt Ion: 95 Resp: 457201

Ion Ratio Lower Upper

95 100

174 86.0 0.0 187.0

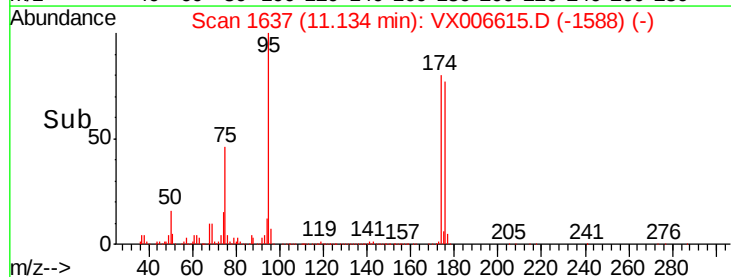
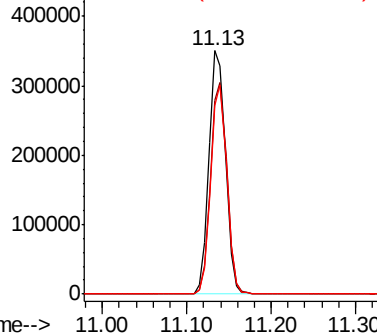
176 83.3 0.0 181.8

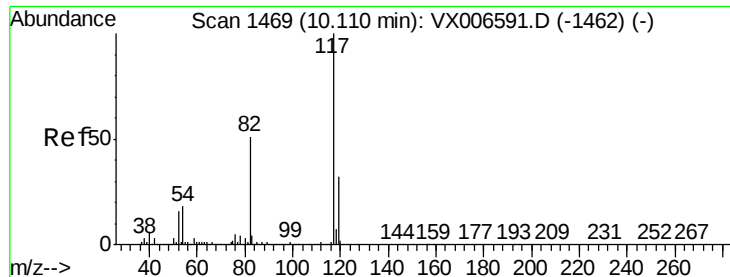


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

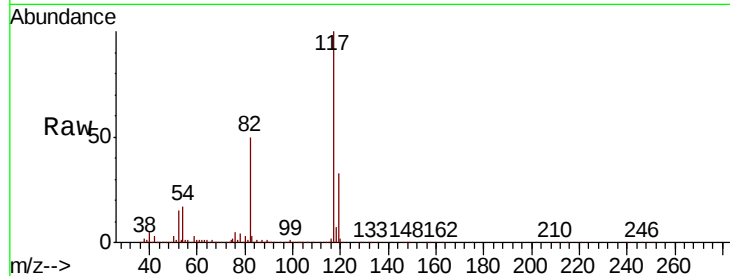




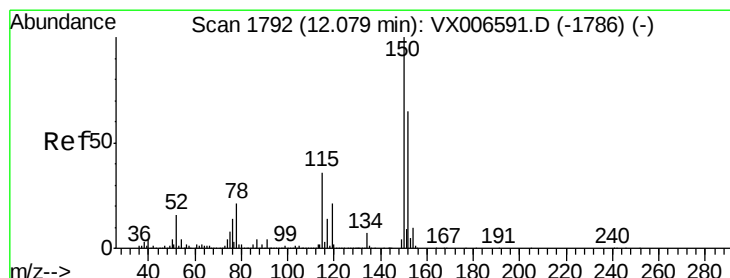
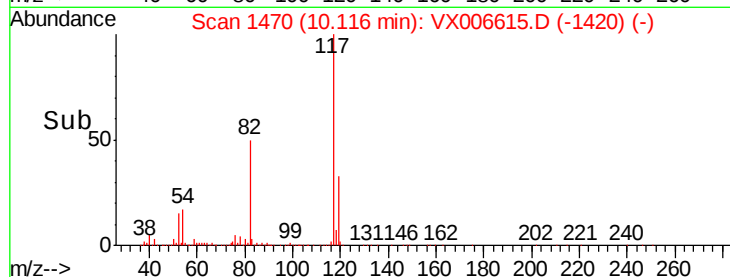
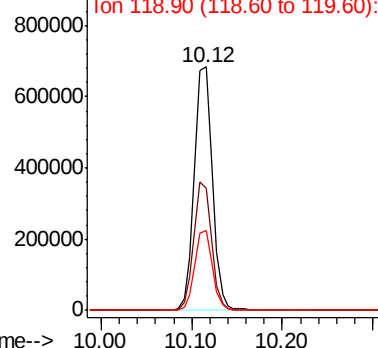
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.01 min  
Lab File: VX006615.D  
Acq: 18 Dec 2018 23:51

Instrument :  
MSVOA\_X  
ClientSampleId :  
DUP04-20181210DL

Tot Ion:117 Resp: 962749  
Ion Ratio Lower Upper  
117 100  
82 49.9 39.6 59.4  
119 32.7 26.3 39.5

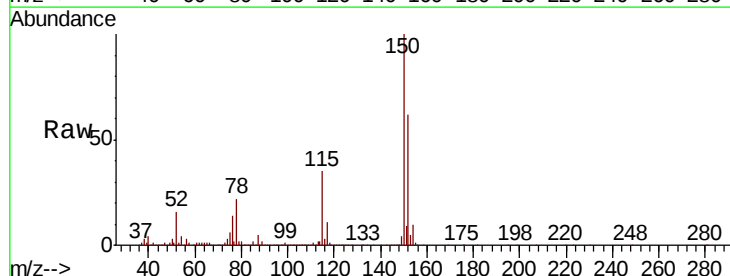


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX  
Ion 118.90 (118.60 to 119.60): V

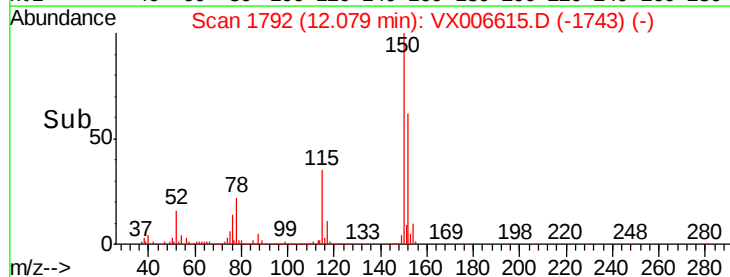
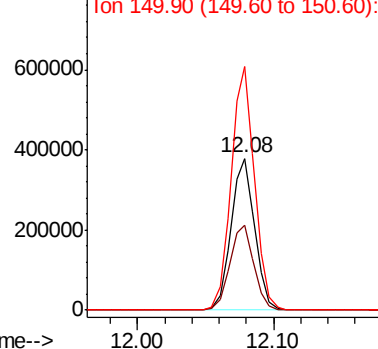


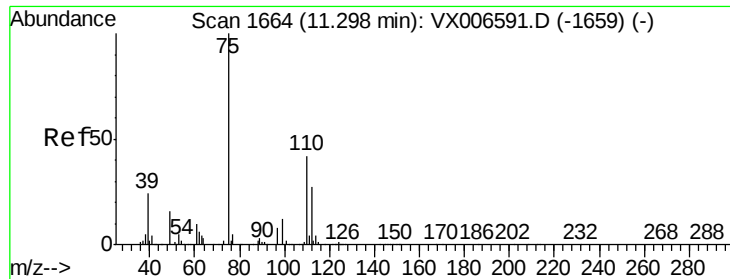
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX006615.D  
Acq: 18 Dec 2018 23:51

Tgt Ion:152 Resp: 461588  
Ion Ratio Lower Upper  
152 100  
115 56.8 39.0 116.9  
150 159.0 0.0 345.8



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: 25.964 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

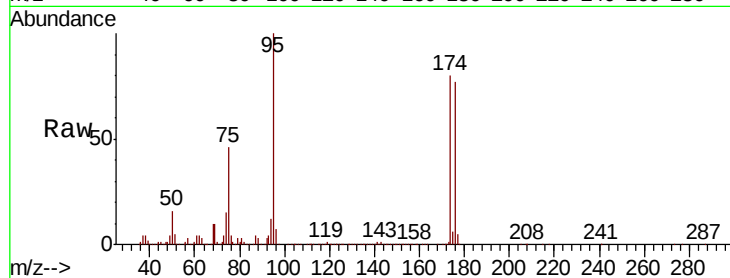
DUP04-20181210DL

Tot Ion: 75 Resp: 210053

Ion Ratio Lower Upper

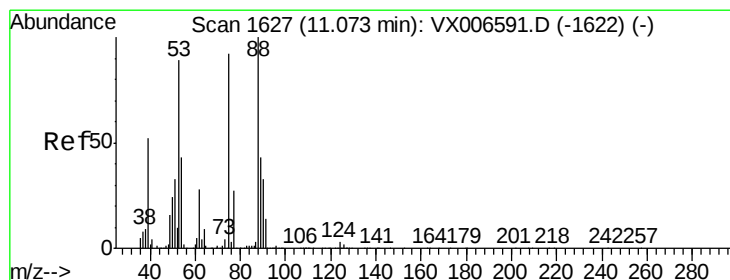
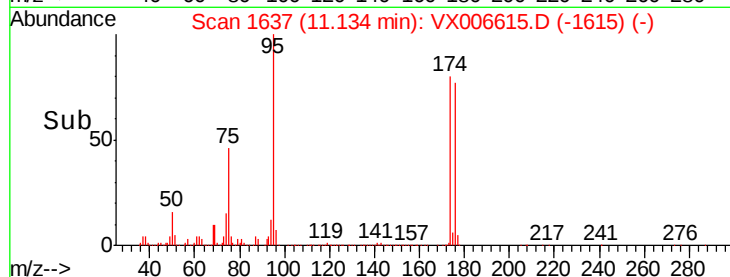
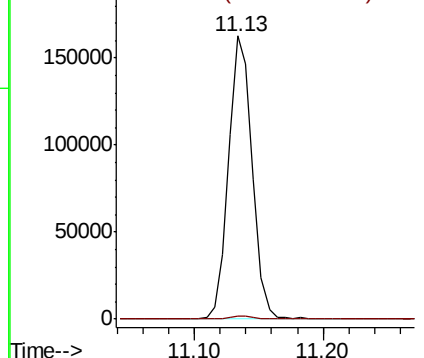
75 100

77 1.3 19.9 59.7#



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: 72.444 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

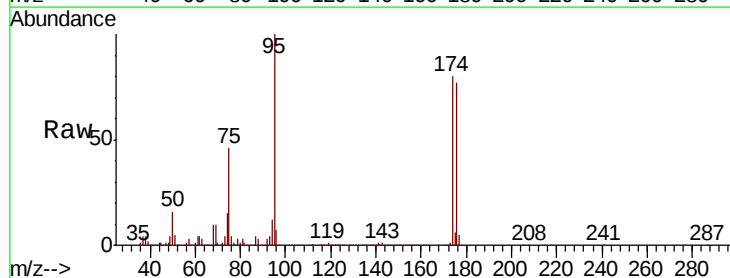
Tgt Ion: 75 Resp: 210053

Ion Ratio Lower Upper

75 100

53 0.1 64.4 96.6#

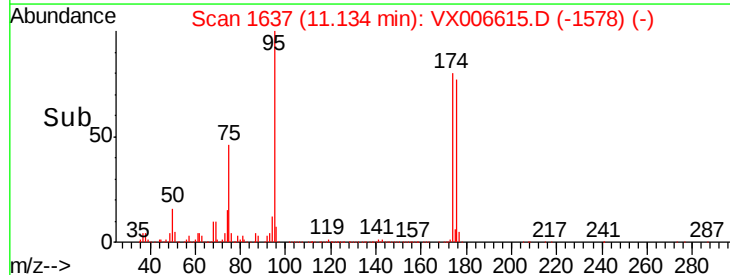
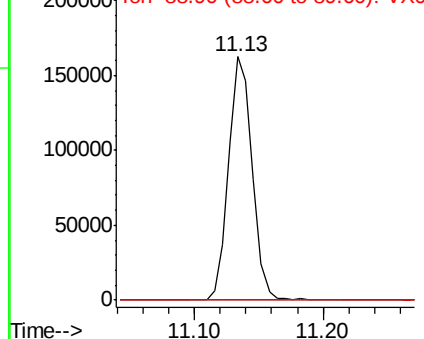
89 0.1 44.2 66.4#

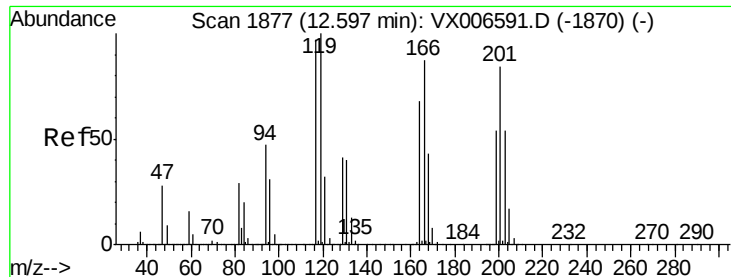


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#90

Hexachloroethane

Concen: 3.300 ug/l

RT: 12.55 min Scan# 1869

Delta R.T. -0.05 min

Lab File: VX006615.D

Acq: 18 Dec 2018 23:51

Instrument :

MSVOA\_X

ClientSampleId :

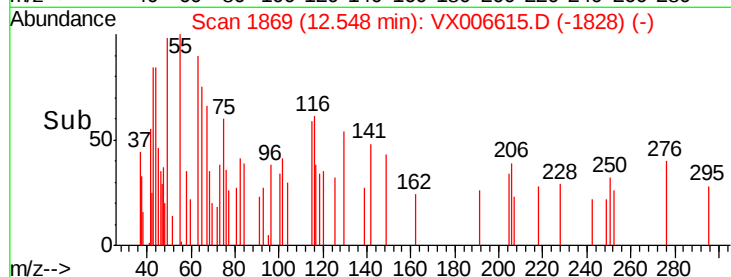
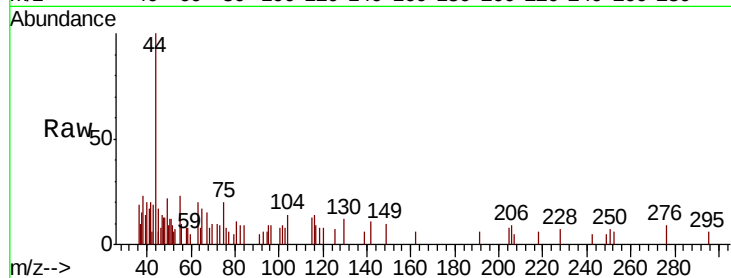
DUP04-20181210DL

Tot Ion:117 Resp: 34

Ion Ratio Lower Upper

117 100

201 61.8 44.7 134.1



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 200.70 (200.40 to 201.40): V

12.55

100

80

60

40

20

0

Time-->

12.54 12.56