

Data Path : W:\HPCHEM1\MSVOA X\DATA\WX052218\  
 Data File : VX001895.D  
 Acq On : 22 May 2018 16:03  
 Operator : JC/MD  
 Sample : J2988-01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: May 23 01:13:41 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X051518W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue May 15 01:36:22 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 324878   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 460294   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 408666   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 218785   | 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   | 256063   | 58.80 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 117.60% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 205216   | 52.83 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.66% |          |
| 50) Toluene-d8              | 8.72  | 98   | 718828   | 51.67 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.34% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 233738   | 46.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.32%  |          |

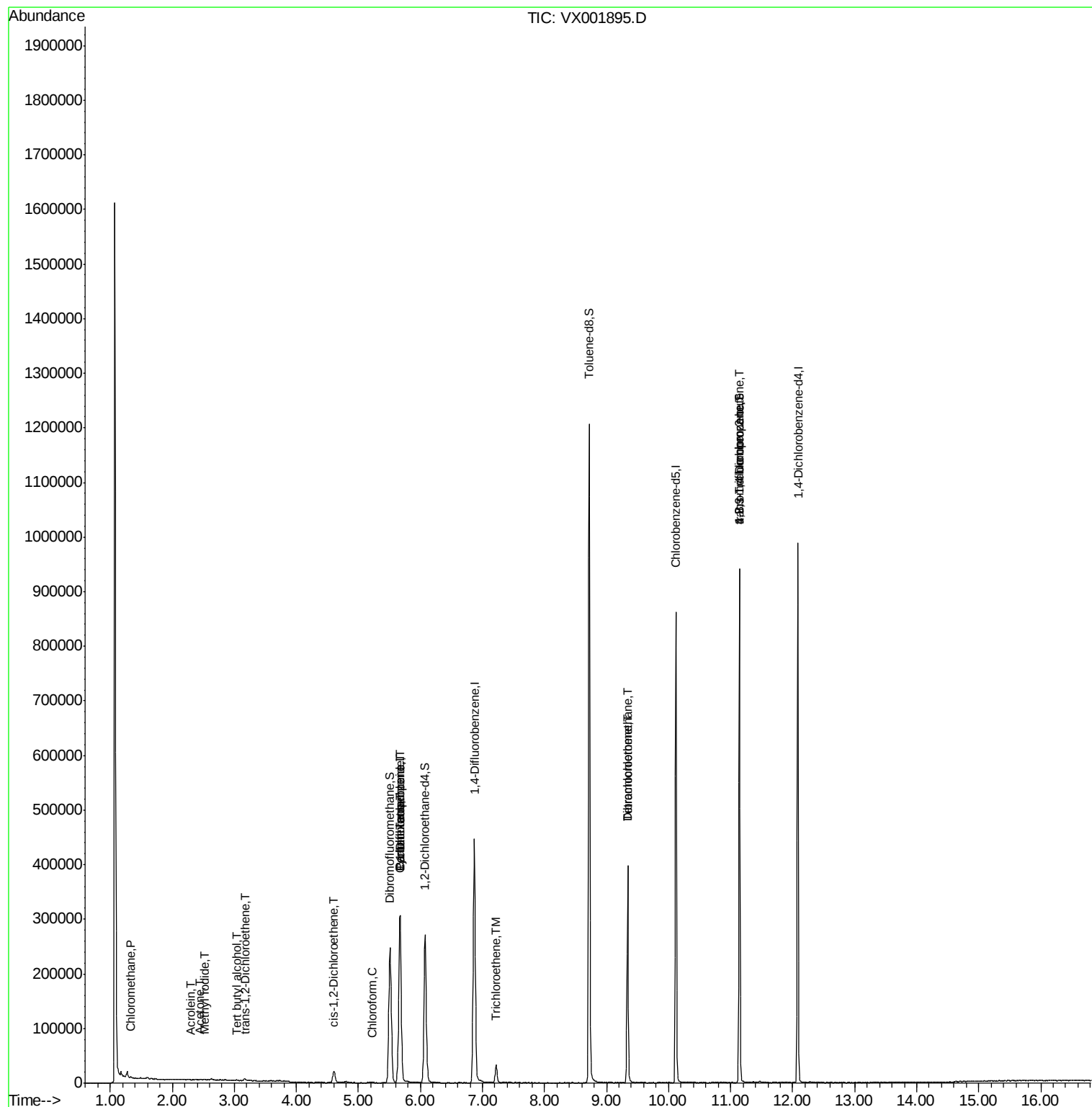
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1417     | 0.40  | ug/l  | # 74   |
| 5) Bromomethane                | 1.65  | 94   | 1085     | Below | Cal   | # 64   |
| 10) Methyl Iodide              | 2.52  | 142  | 1551     | 0.51  | ug/l  | 94     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 996      | 1.29  | ug/l  | # 77   |
| 13) Acrolein                   | 2.29  | 56   | 296      | 0.54  | ug/l  | 85     |
| 16) Acetone                    | 2.45  | 43   | 1952     | 1.14  | ug/l  | 92     |
| 21) trans-1,2-Dichloroethene   | 3.17  | 96   | 1193     | 0.34  | ug/l  | 87     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 12880    | 3.20  | ug/l  | 96     |
| 30) Chloroform                 | 5.21  | 83   | 1335     | 0.20  | ug/l  | # 79   |
| 31) Cyclohexane                | 5.66  | 56   | 5549     | 1.01  | ug/l  | # 17   |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 20265    | 3.82  | ug/l  | # 50   |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 27449    | 4.95  | ug/l  | # 16   |
| 44) Trichloroethene            | 7.21  | 130  | 13287    | 2.74  | ug/l  | 98     |
| 60) Dibromochloromethane       | 9.34  | 129  | 71834    | 18.29 | ug/l  | # 11   |
| 64) Tetrachloroethene          | 9.34  | 164  | 86604    | 16.28 | ug/l  | 99     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 112165   | 26.96 | ug/l  | # 39   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 112165   | 78.34 | ug/l  | # 10   |

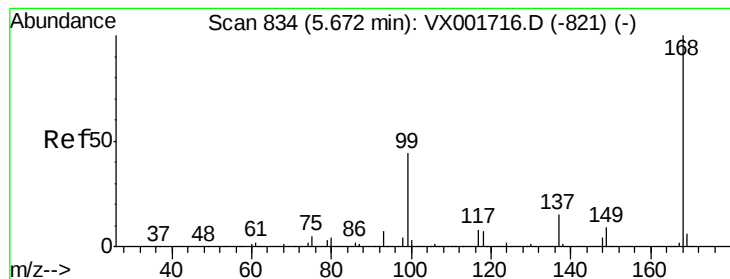
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX052218\  
Data File : VX001895.D  
Acq On : 22 May 2018 16:03  
Operator : JC/MD  
Sample : J2988-01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: May 23 01:13:41 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X051518W.M  
Quant Title : SW846 8260  
QLast Update : Tue May 15 01:36:22 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.00 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

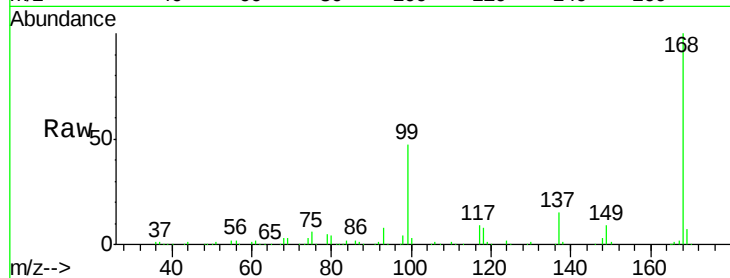
ClientSampled :

Tot Ion:168 Resp: 324878

Ion Ratio Lower Upper

168 100

99 46.7 35.0 52.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

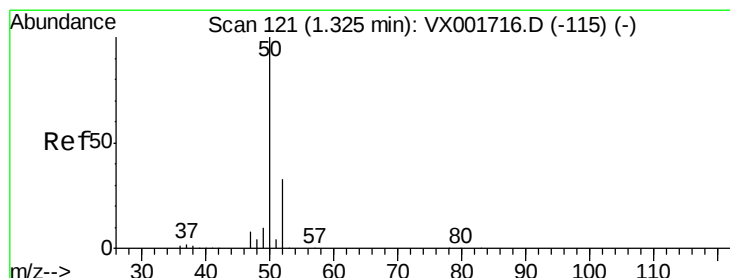
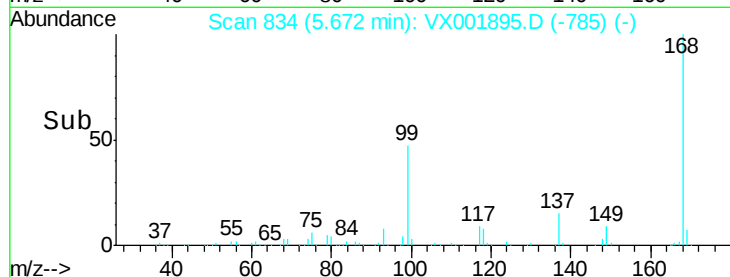
5.67

100000

50000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.40 ug/l

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX001895.D

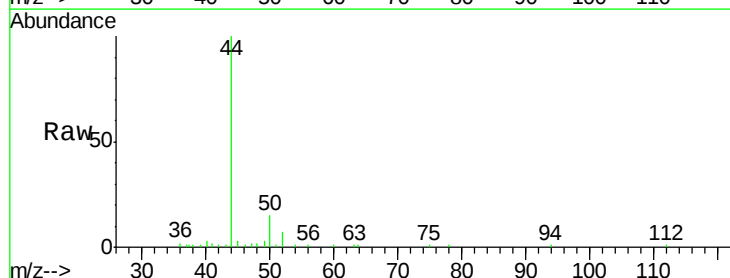
Acq: 22 May 2018 16:03

Tgt Ion: 50 Resp: 1417

Ion Ratio Lower Upper

50 100

52 47.5 26.3 39.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

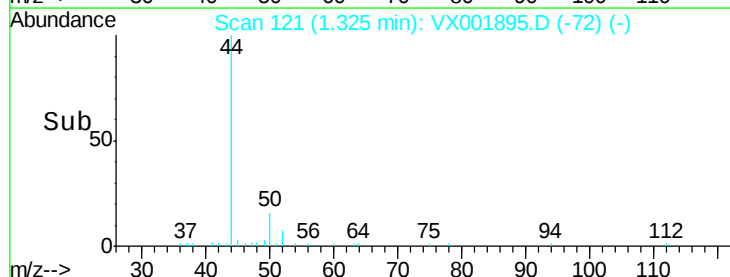
1.32

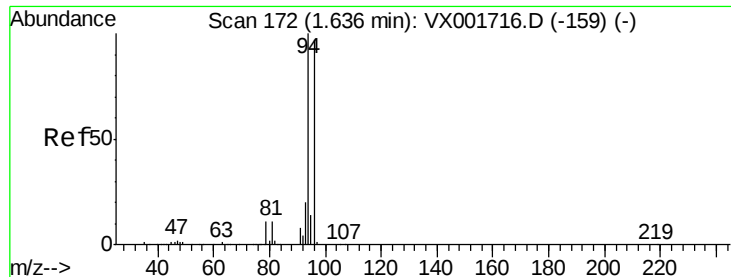
1000

500

0

Time--> 1.30 1.35





#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 174

Delta R.T. 0.01 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

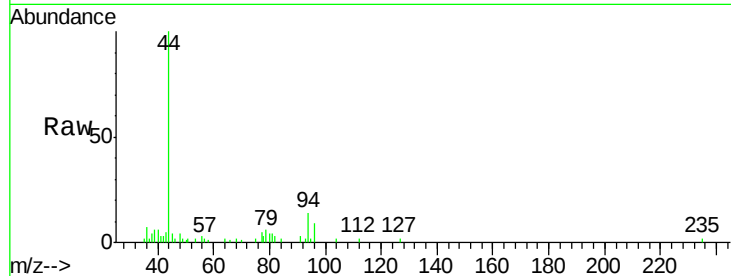
ClientSampleId :

Tot Ion: 94 Resp: 1085

Ion Ratio Lower Upper

94 100

96 61.0 77.4 116.0#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.65

400

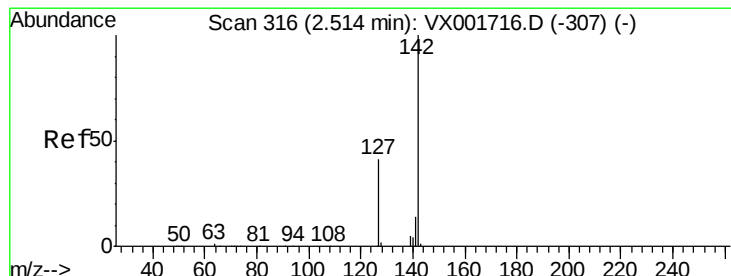
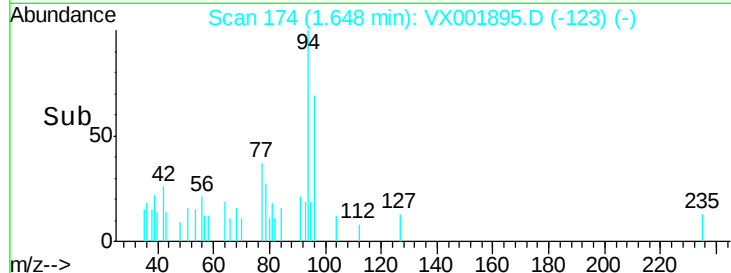
300

200

100

0

Time-->



#10

Methyl Iodide

Concen: 0.51 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

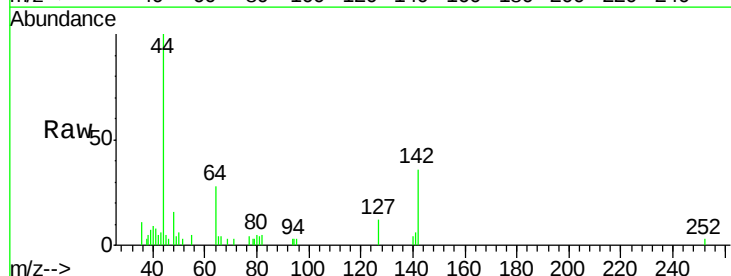
Tgt Ion: 142 Resp: 1551

Ion Ratio Lower Upper

142 100

127 44.2 32.5 48.7

141 16.2 11.4 17.0



Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

1000

800

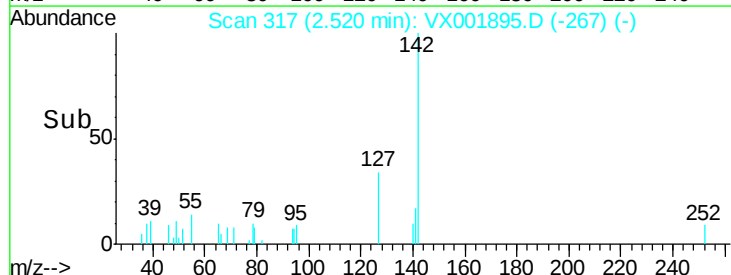
600

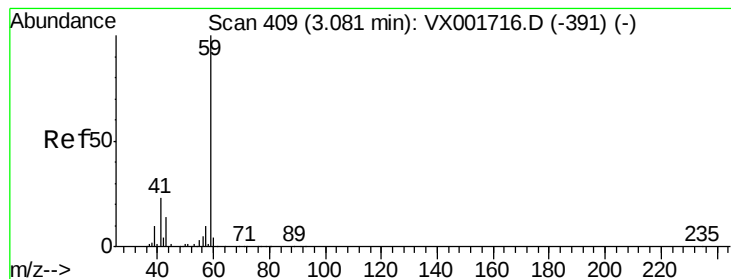
400

200

0

Time-->





#11

Tert butyl alcohol

Concen: 1.29 ug/l

RT: 3.03 min Scan# 400

Delta R.T. -0.05 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

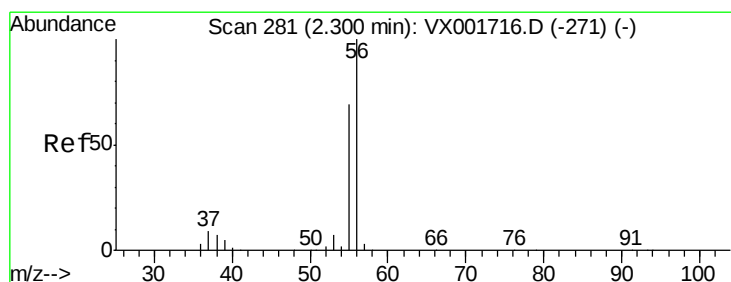
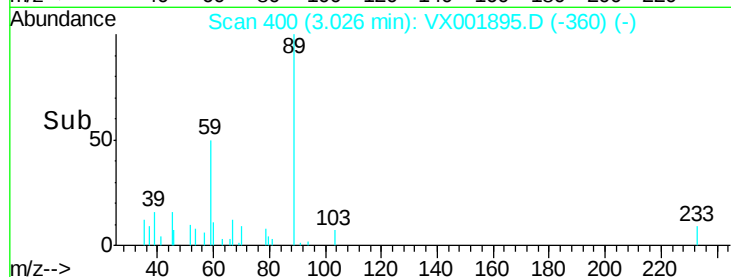
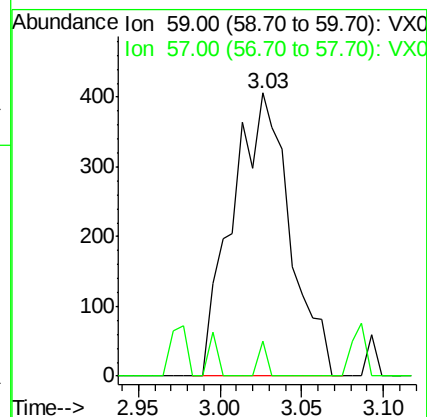
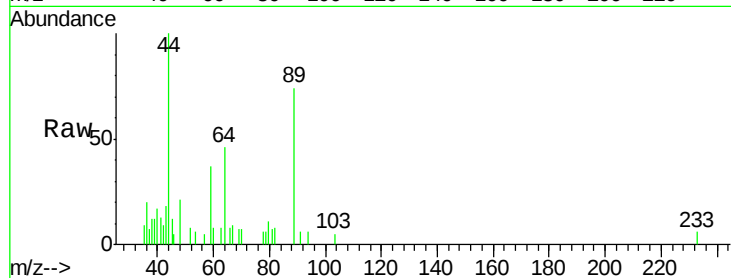
ClientSampleId :

Tot Ion: 59 Resp: 996

Ion Ratio Lower Upper

59 100

57 1.9 8.5 12.7#



#13

Acrolein

Concen: 0.54 ug/l

RT: 2.29 min Scan# 279

Delta R.T. -0.01 min

Lab File: VX001895.D

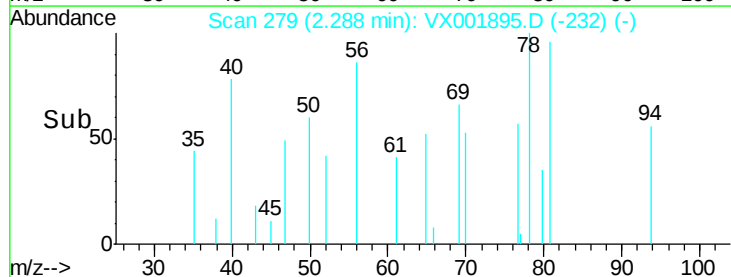
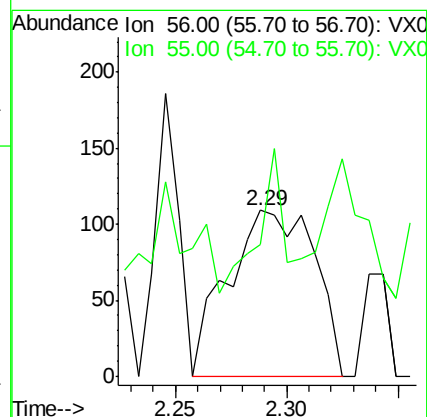
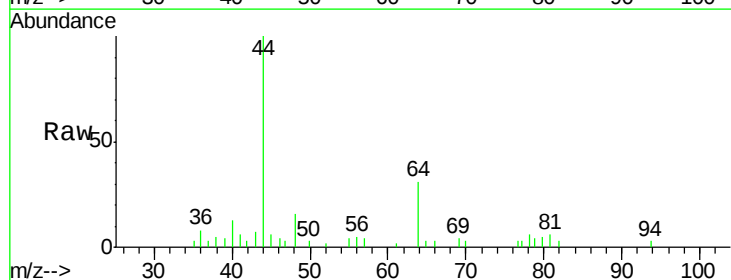
Acq: 22 May 2018 16:03

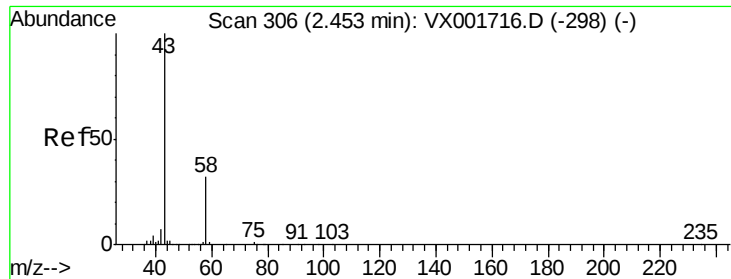
Tgt Ion: 56 Resp: 296

Ion Ratio Lower Upper

56 100

55 58.1 56.2 84.2





#16

Acetone

Concen: 1.14 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

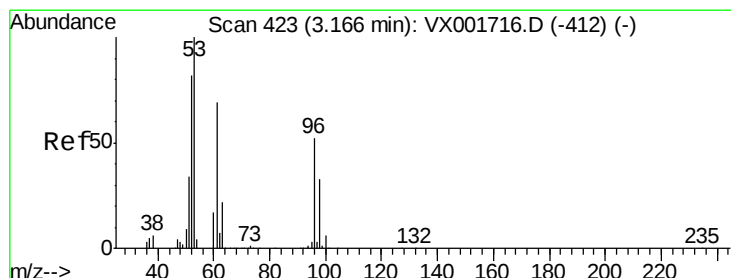
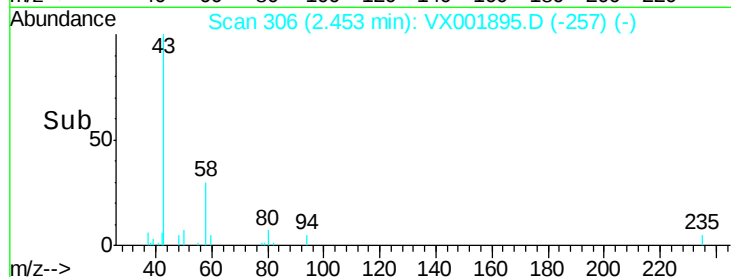
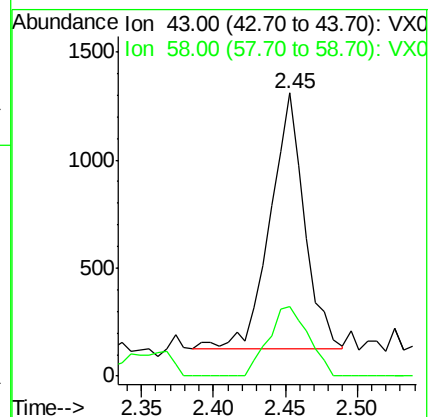
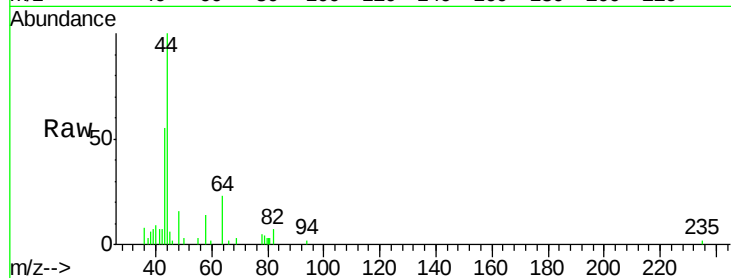
ClientSampleId :

Tot Ion: 43 Resp: 1952

Ion Ratio Lower Upper

43 100

58 27.1 25.3 37.9



#21

trans-1,2-Dichloroethene

Concen: 0.34 ug/l

RT: 3.17 min Scan# 424

Delta R.T. 0.01 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

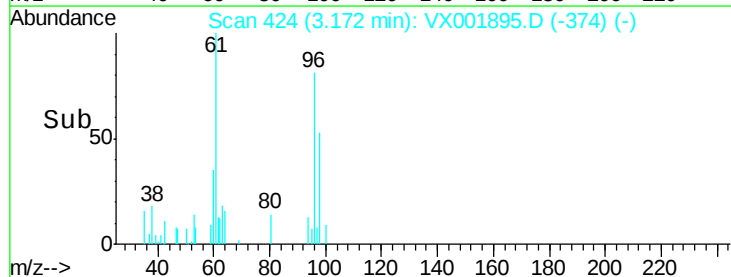
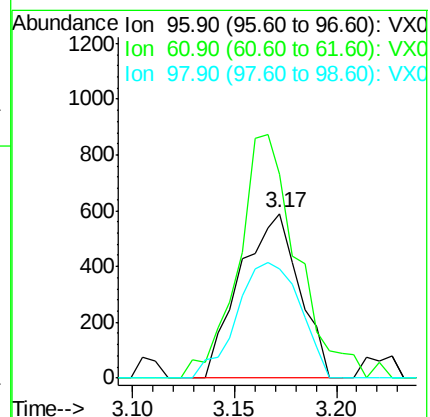
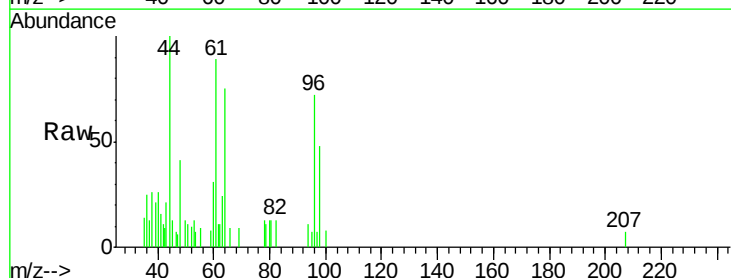
Tgt Ion: 96 Resp: 1193

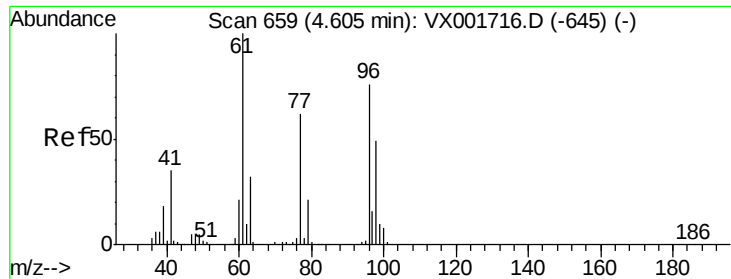
Ion Ratio Lower Upper

96 100

61 112.4 105.8 158.8

98 66.2 50.2 75.4





#27

cis-1,2-Dichloroethene

Concen: 3.20 ug/l

RT: 4.60 min Scan# 659

Delta R.T. 0.00 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :  
MSVOA\_X  
ClientSampleId :

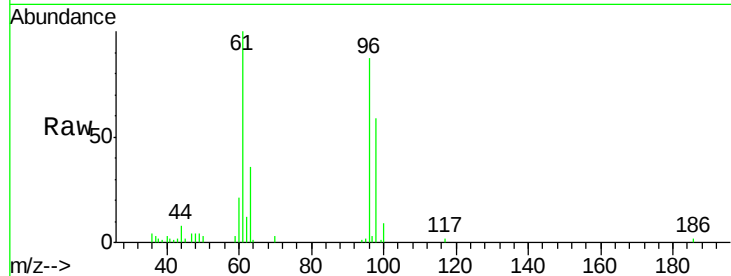
Tot Ion: 96 Resp: 12880

Ion Ratio Lower Upper

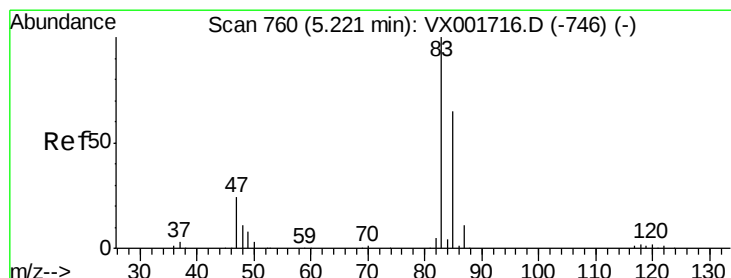
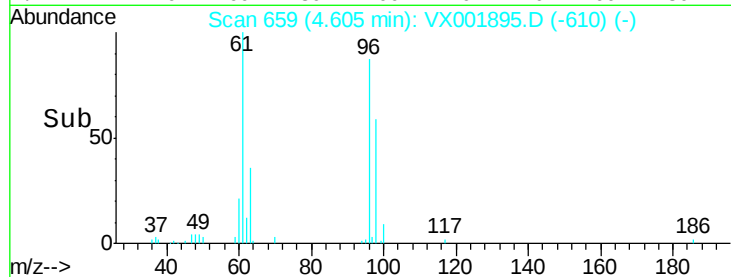
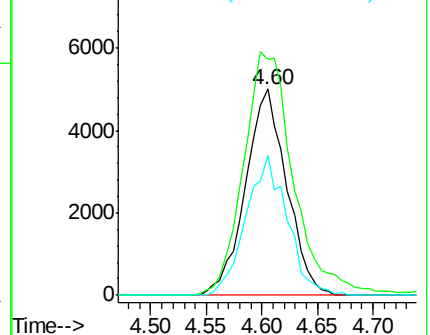
96 100

61 144.5 0.0 280.4

98 68.1 0.0 128.4



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: 0.20 ug/l

RT: 5.21 min Scan# 759

Delta R.T. -0.01 min

Lab File: VX001895.D

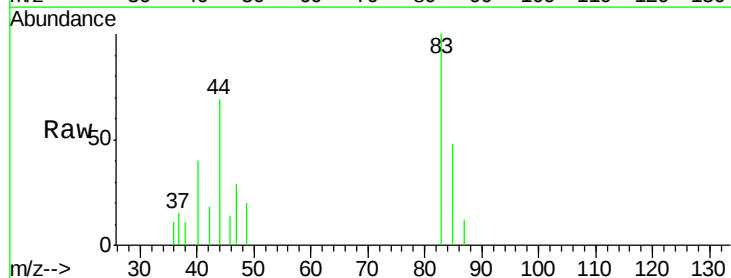
Acq: 22 May 2018 16:03

Tgt Ion: 83 Resp: 1335

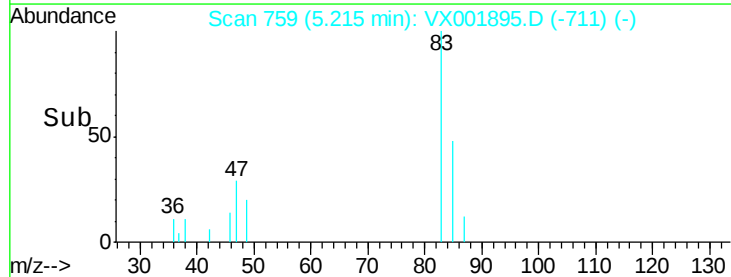
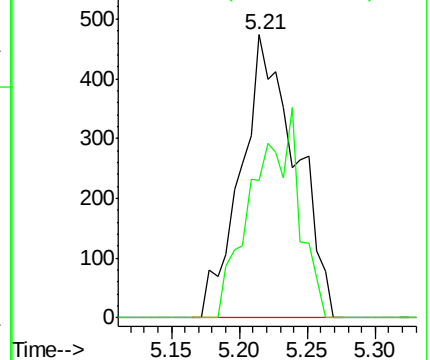
Ion Ratio Lower Upper

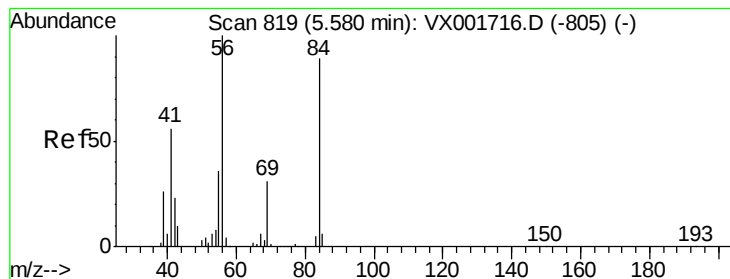
83 100

85 48.4 52.3 78.5#



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





#31

Cyclohexane

Concen: 1.01 ug/l

RT: 5.66 min Scan# 832

Delta R.T. 0.08 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :  
MSVOA\_X  
ClientSampled :

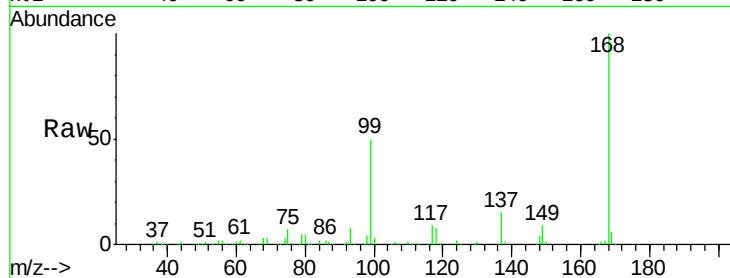
Tot Ion: 56 Resp: 5549

Ion Ratio Lower Upper

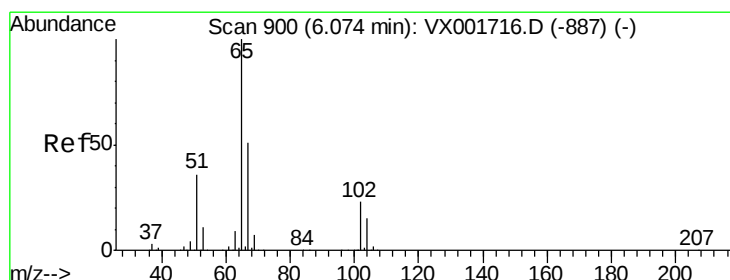
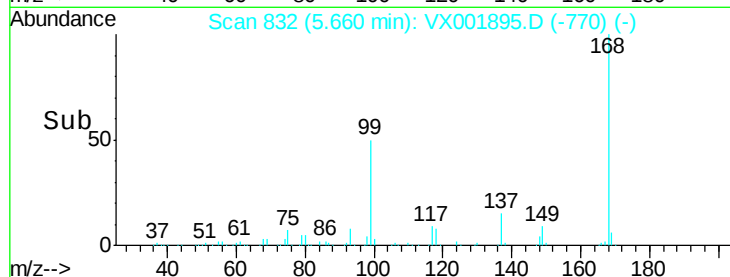
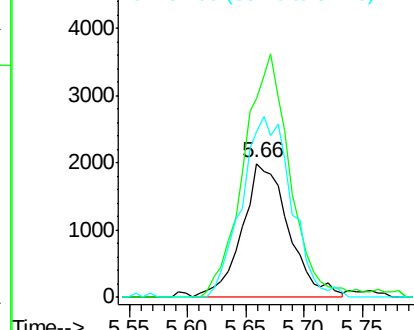
56 100

69 148.4 25.0 37.6#

84 123.9 71.0 106.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0



#33

1,2-Dichloroethane-d4

Concen: 58.80 ug/l

RT: 6.07 min Scan# 900

Delta R.T. 0.00 min

Lab File: VX001895.D

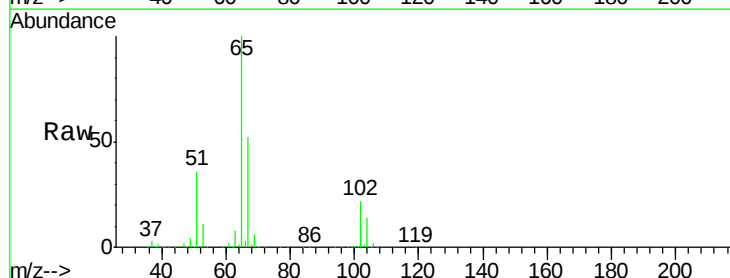
Acq: 22 May 2018 16:03

Tgt Ion: 65 Resp: 256063

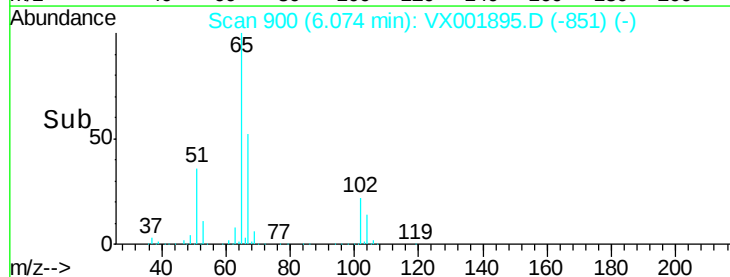
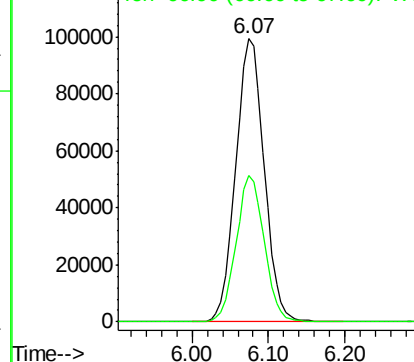
Ion Ratio Lower Upper

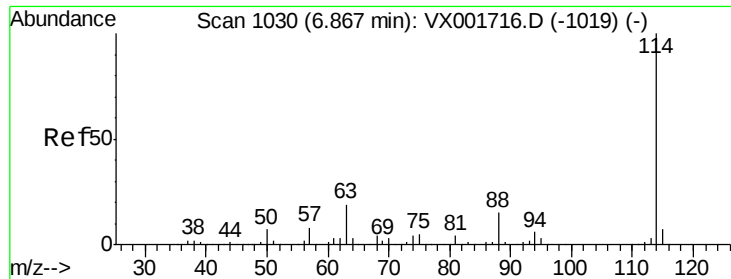
65 100

67 50.9 0.0 102.8



Abundance Ion 64.90 (64.60 to 65.60): VX0  
Ion 66.90 (66.60 to 67.60): VX0

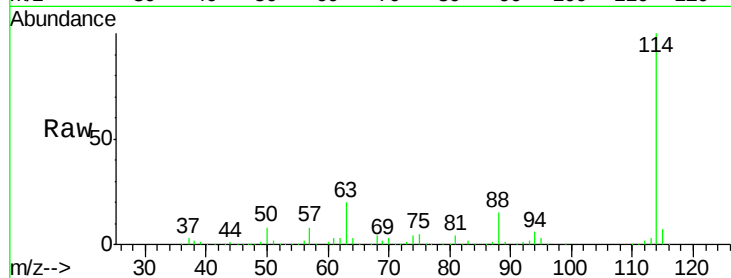




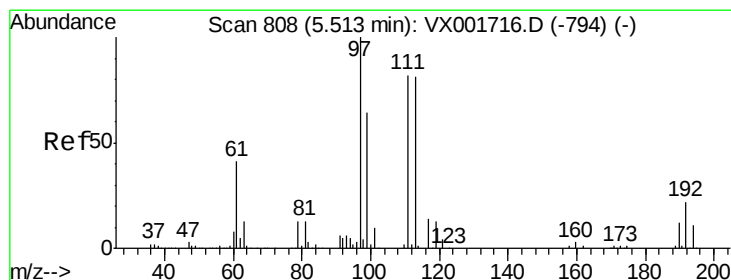
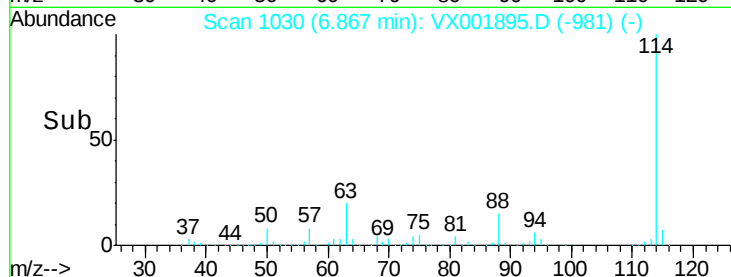
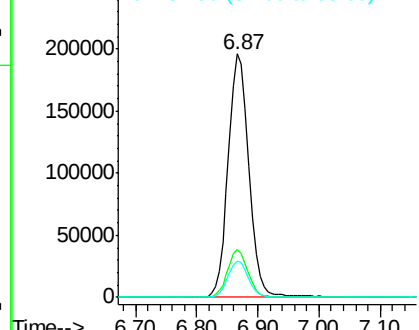
#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 6.87 min Scan# 1030  
 Delta R.T. 0.00 min  
 Lab File: VX001895.D  
 Acq: 22 May 2018 16:03

Instrument :  
 MSVOA\_X  
 ClientSampled :

Tot Ion:114 Resp: 460294  
 Ion Ratio Lower Upper  
 114 100  
 63 19.8 0.0 37.0  
 88 15.1 0.0 29.8

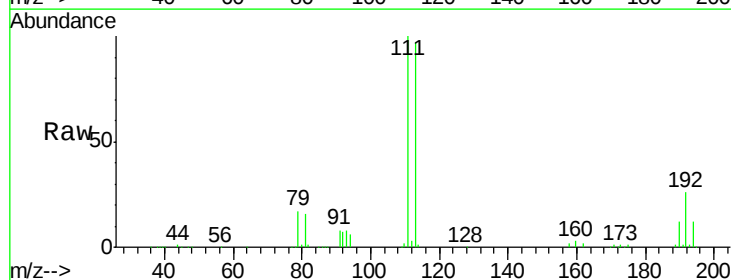


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

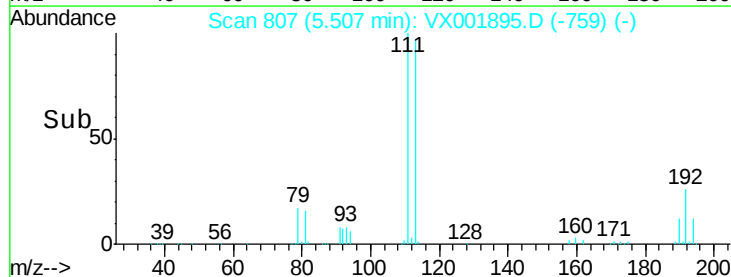
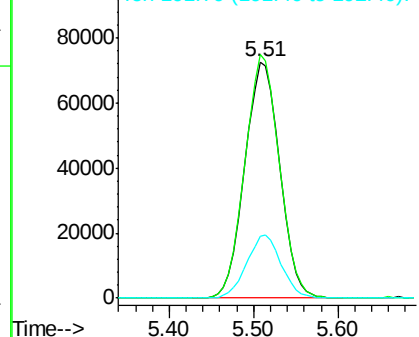


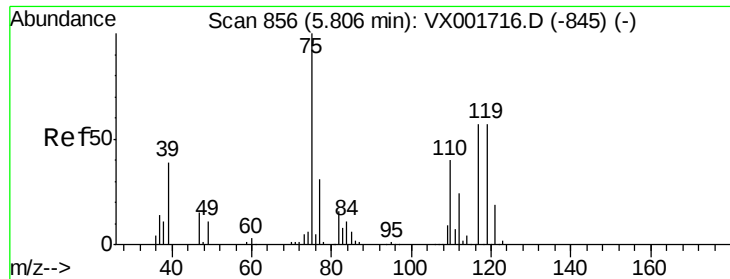
#35  
 Dibromofluoromethane  
 Concen: 52.83 ug/l  
 RT: 5.51 min Scan# 807  
 Delta R.T. -0.01 min  
 Lab File: VX001895.D  
 Acq: 22 May 2018 16:03

Tgt Ion:113 Resp: 205216  
 Ion Ratio Lower Upper  
 113 100  
 111 101.4 82.0 123.0  
 192 26.5 21.6 32.4



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: 3.82 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.14 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

ClientSampled :

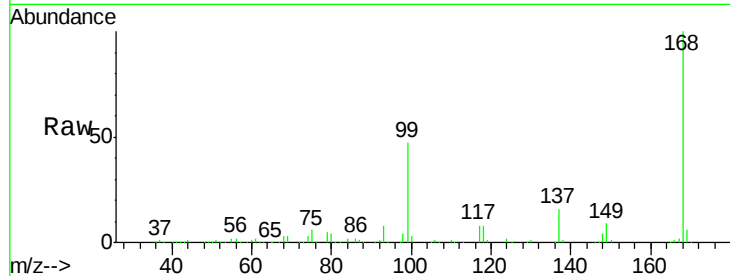
Tot Ion: 75 Resp: 20265

Ion Ratio Lower Upper

75 100

110 10.4 19.1 57.1#

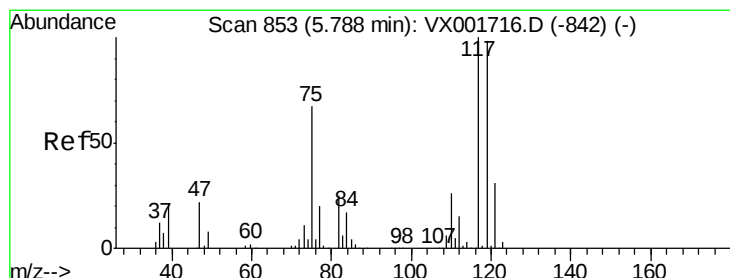
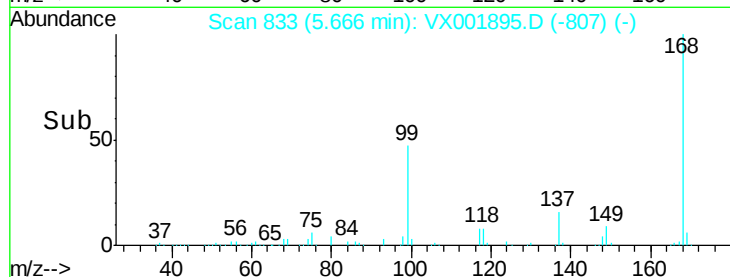
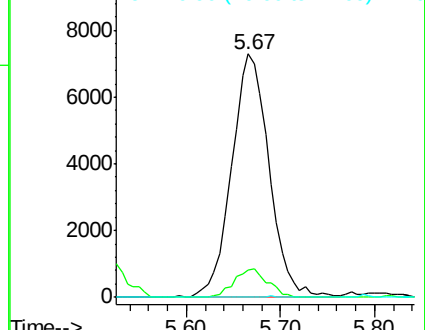
77 0.0 24.6 37.0#



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: 4.95 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.12 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

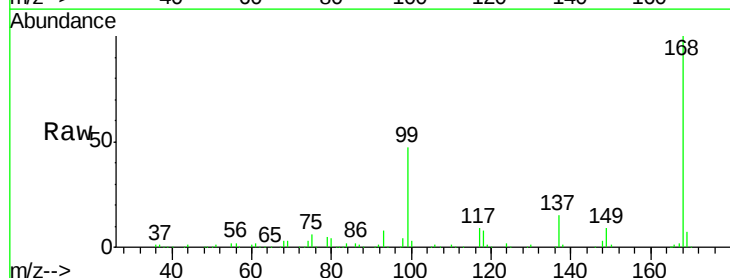
Tgt Ion:117 Resp: 27449

Ion Ratio Lower Upper

117 100

119 6.2 77.6 116.4#

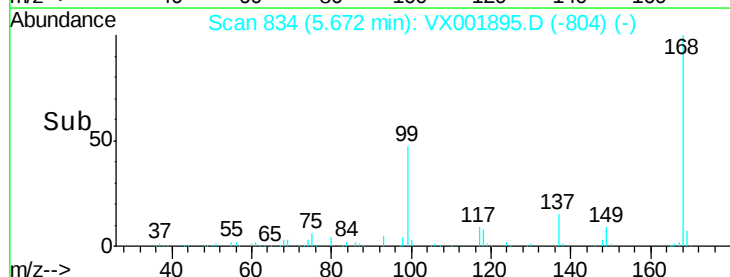
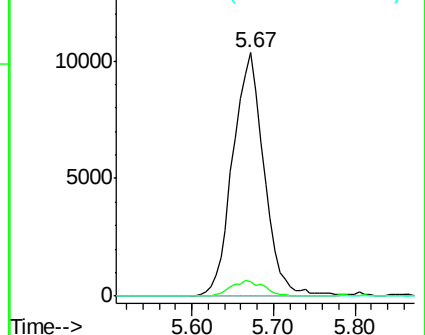
121 0.0 24.6 36.8#

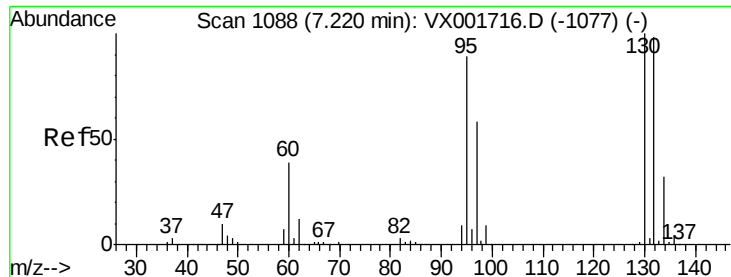


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V





#44

Trichloroethene

Concen: 2.74 ug/l

RT: 7.21 min Scan# 1087

Delta R.T. -0.01 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

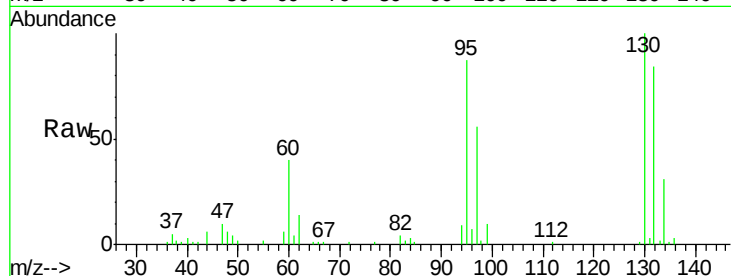
ClientSampleId :

Tot Ion:130 Resp: 13287

Ion Ratio Lower Upper

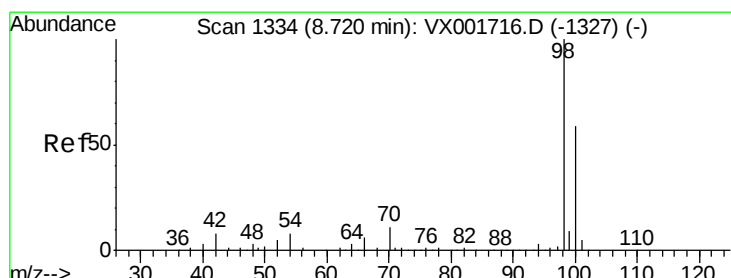
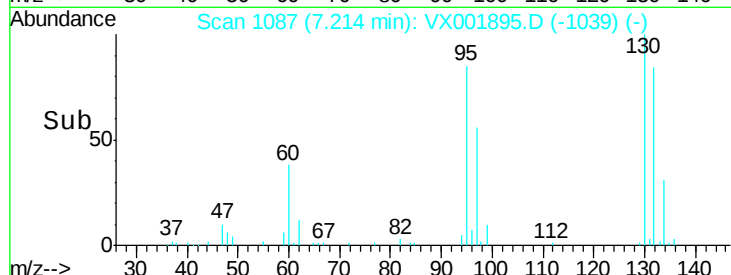
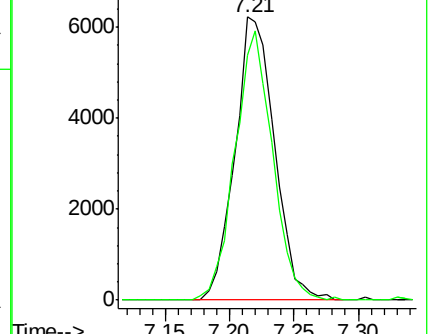
130 100

95 86.5 0.0 177.2



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0



#50

Toluene-d8

Concen: 51.67 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX001895.D

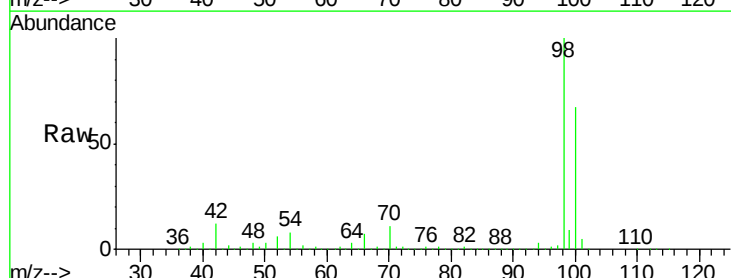
Acq: 22 May 2018 16:03

Tgt Ion: 98 Resp: 718828

Ion Ratio Lower Upper

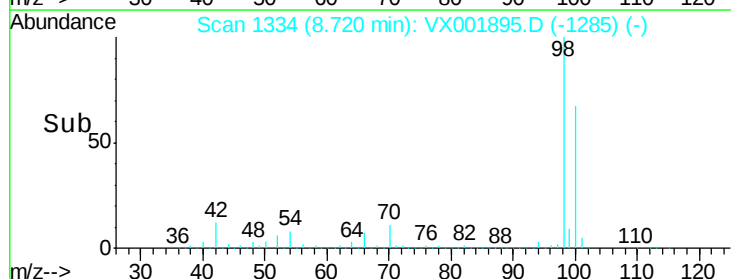
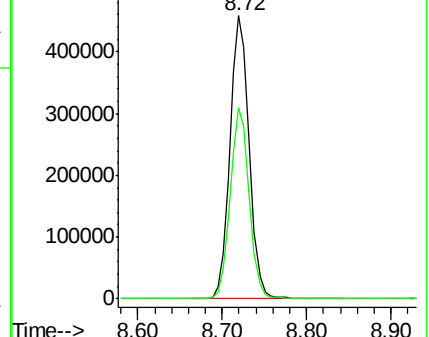
98 100

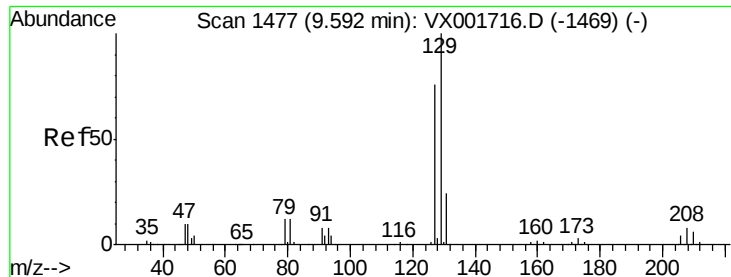
100 66.7 54.0 81.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

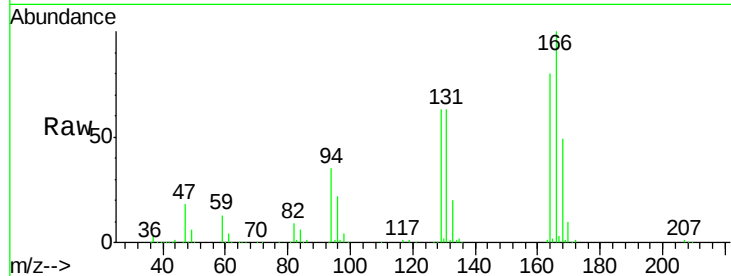




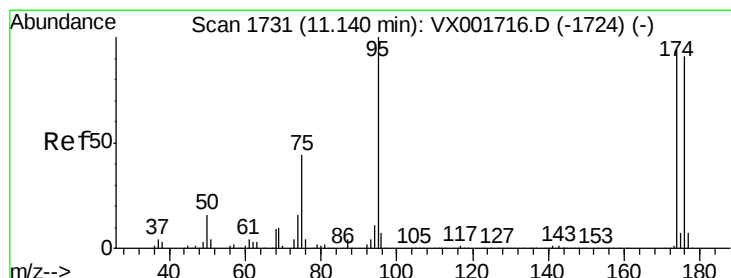
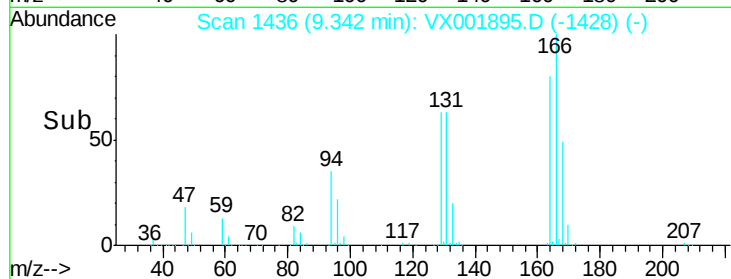
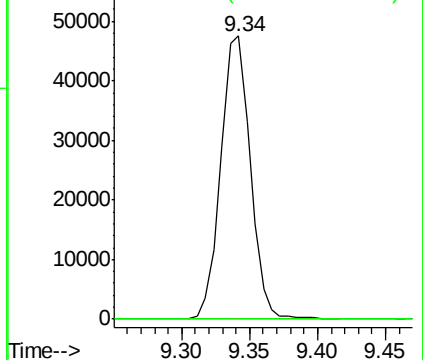
#60  
 Dibromochloromethane  
 Concen: 18.29 ug/l  
 RT: 9.34 min Scan# 1436  
 Delta R.T. -0.25 min  
 Lab File: VX001895.D  
 Acq: 22 May 2018 16:03

Instrument :  
 MSVOA\_X  
 ClientSampled :

Tot Ion:129 Resp: 71834  
 Ion Ratio Lower Upper  
 129 100  
 127 0.1 38.7 116.1#

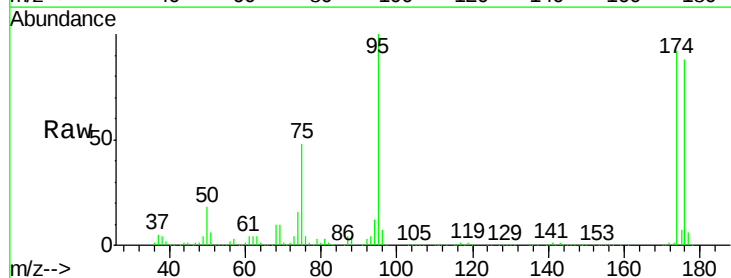


Abundance Ion 128.80 (128.50 to 129.50): V  
 Ion 126.80 (126.50 to 127.50): V

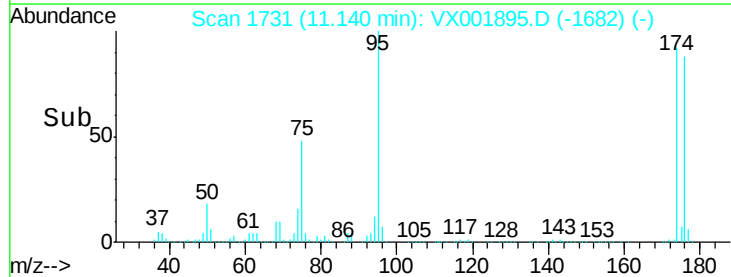
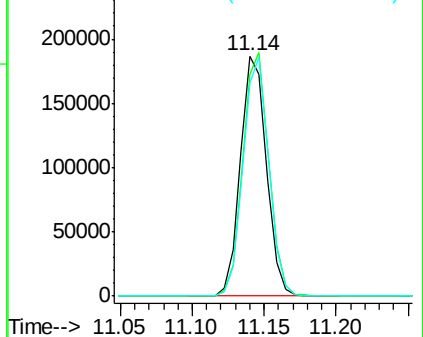


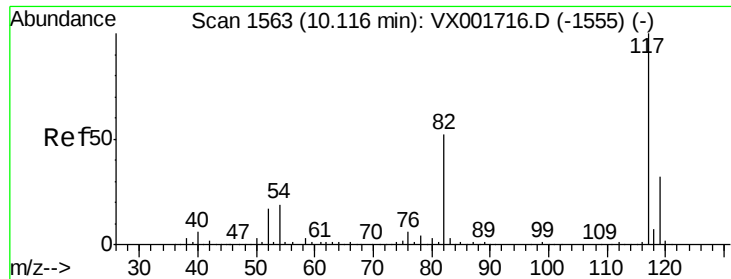
#62  
 4-Bromofluorobenzene  
 Concen: 46.66 ug/l  
 RT: 11.14 min Scan# 1731  
 Delta R.T. 0.00 min  
 Lab File: VX001895.D  
 Acq: 22 May 2018 16:03

Tgt Ion: 95 Resp: 233738  
 Ion Ratio Lower Upper  
 95 100  
 174 101.3 0.0 201.8  
 176 97.9 0.0 196.8



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

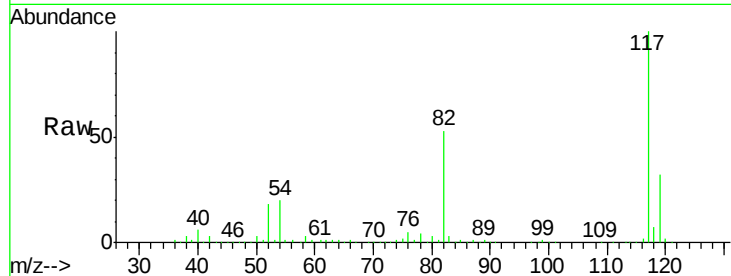




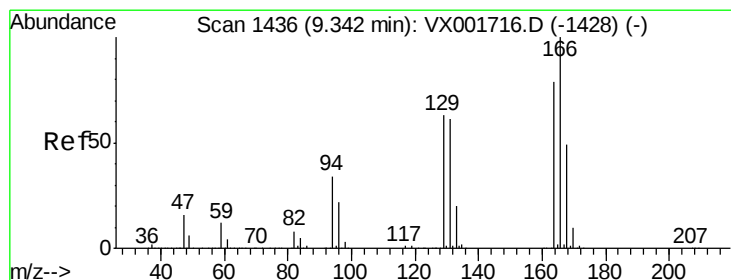
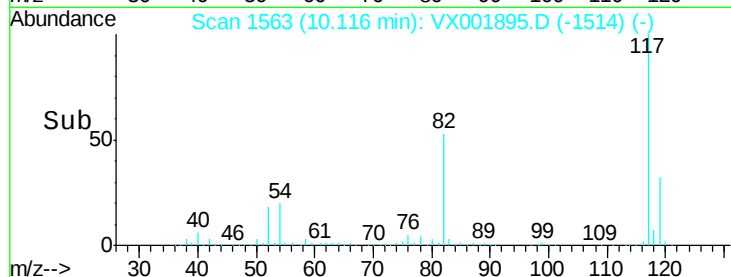
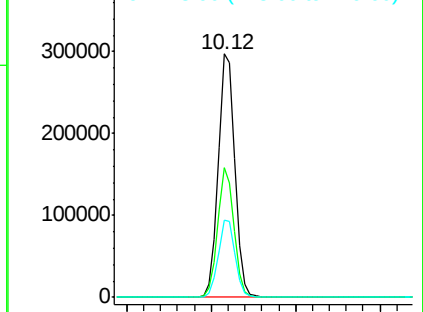
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. 0.00 min  
Lab File: VX001895.D  
Acq: 22 May 2018 16:03

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:117 Resp: 408666  
Ion Ratio Lower Upper  
117 100  
82 53.3 41.4 62.2  
119 31.9 25.6 38.4

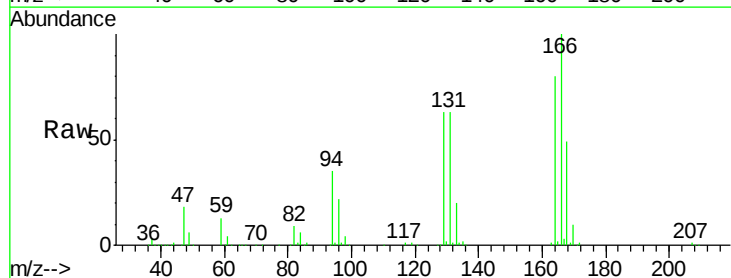


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

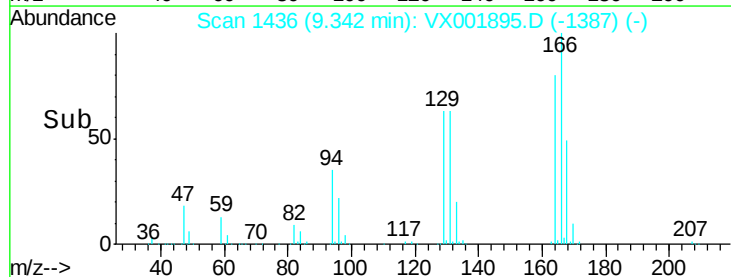
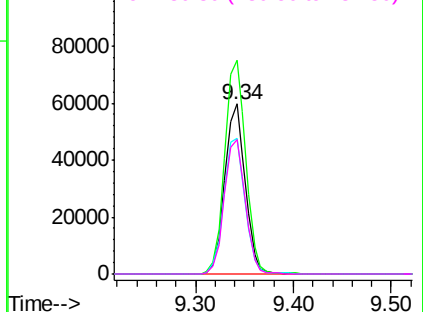


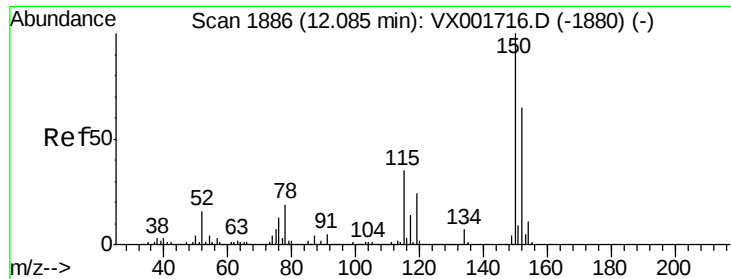
#64  
Tetrachloroethene  
Concen: 16.28 ug/l  
RT: 9.34 min Scan# 1436  
Delta R.T. 0.00 min  
Lab File: VX001895.D  
Acq: 22 May 2018 16:03

Tgt Ion:164 Resp: 86604  
Ion Ratio Lower Upper  
164 100  
166 125.6 101.8 152.8  
129 79.6 63.8 95.6  
131 79.0 62.2 93.2



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: 50.00 ug/l

RT: 12.09 min Scan# 1886

Delta R.T. 0.00 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

ClientSampleId :

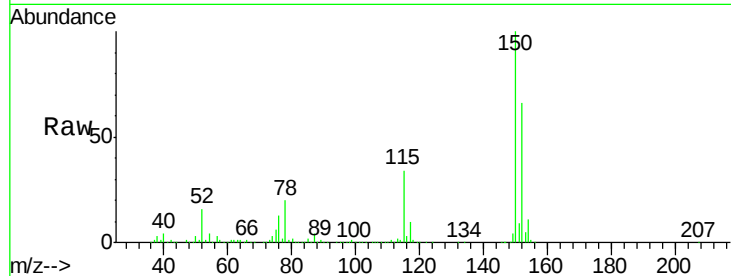
Tot Ion:152 Resp: 218785

Ion Ratio Lower Upper

152 100

115 52.0 37.4 112.2

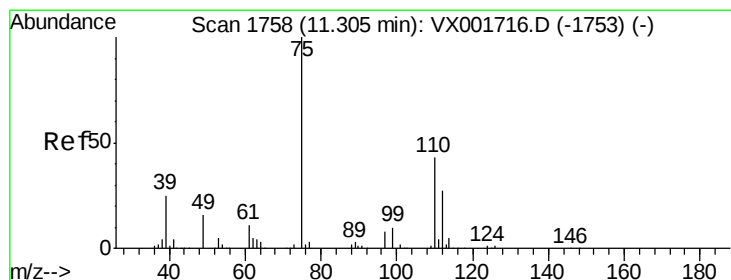
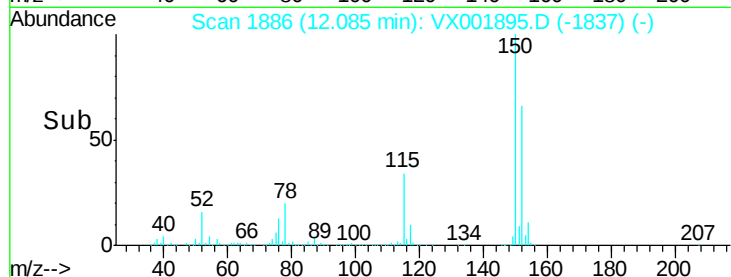
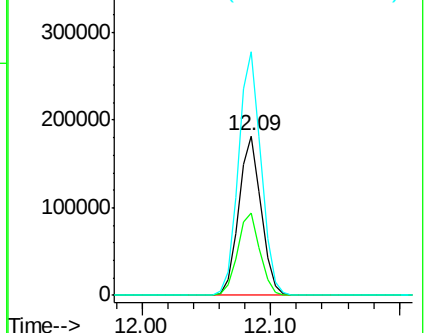
150 154.4 0.0 344.8



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: 26.96 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX001895.D

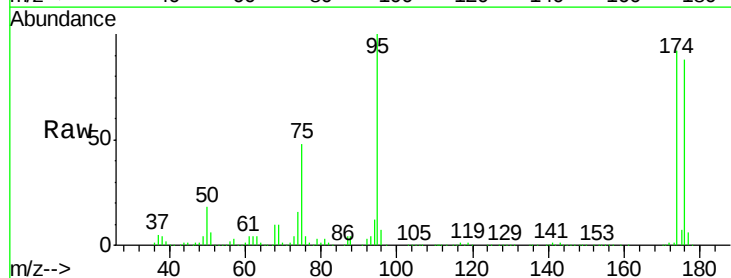
Acq: 22 May 2018 16:03

Tgt Ion: 75 Resp: 112165

Ion Ratio Lower Upper

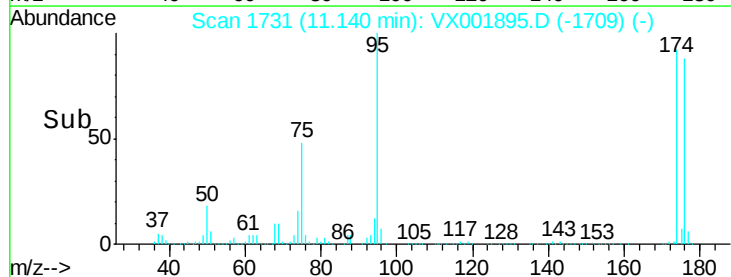
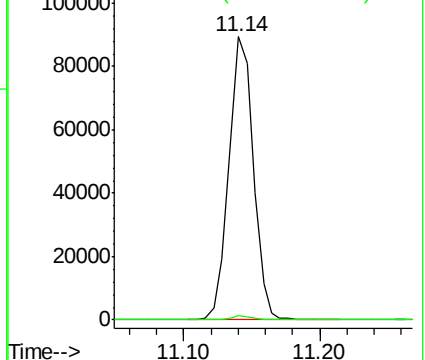
75 100

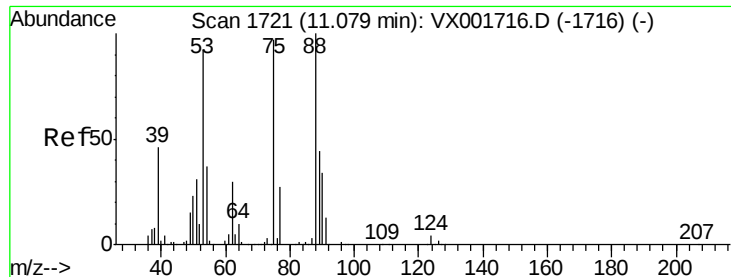
77 1.3 18.9 56.7#



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: 78.34 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX001895.D

Acq: 22 May 2018 16:03

Instrument :

MSVOA\_X

ClientSampleId :

Tot Ion: 75 Resp: 112165

Ion Ratio Lower Upper

75 100

53 0.1 79.4 119.2#

89 0.0 38.8 58.2#

