

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX052218\  
 Data File : VX001926.D  
 Acq On : 23 May 2018 06:19  
 Operator : JC/MD  
 Sample : PB109456ZHE#06  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 38 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: May 23 06:47:27 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  | 248741   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 336484   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 278712   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 153724   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.08  | 65   | 156828   | 47.04 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.08% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 130586   | 45.99 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.98% |          |
| 50) Toluene-d8              | 8.72  | 98   | 478019   | 47.00 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.00% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 139452   | 38.08 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 76.16% |          |

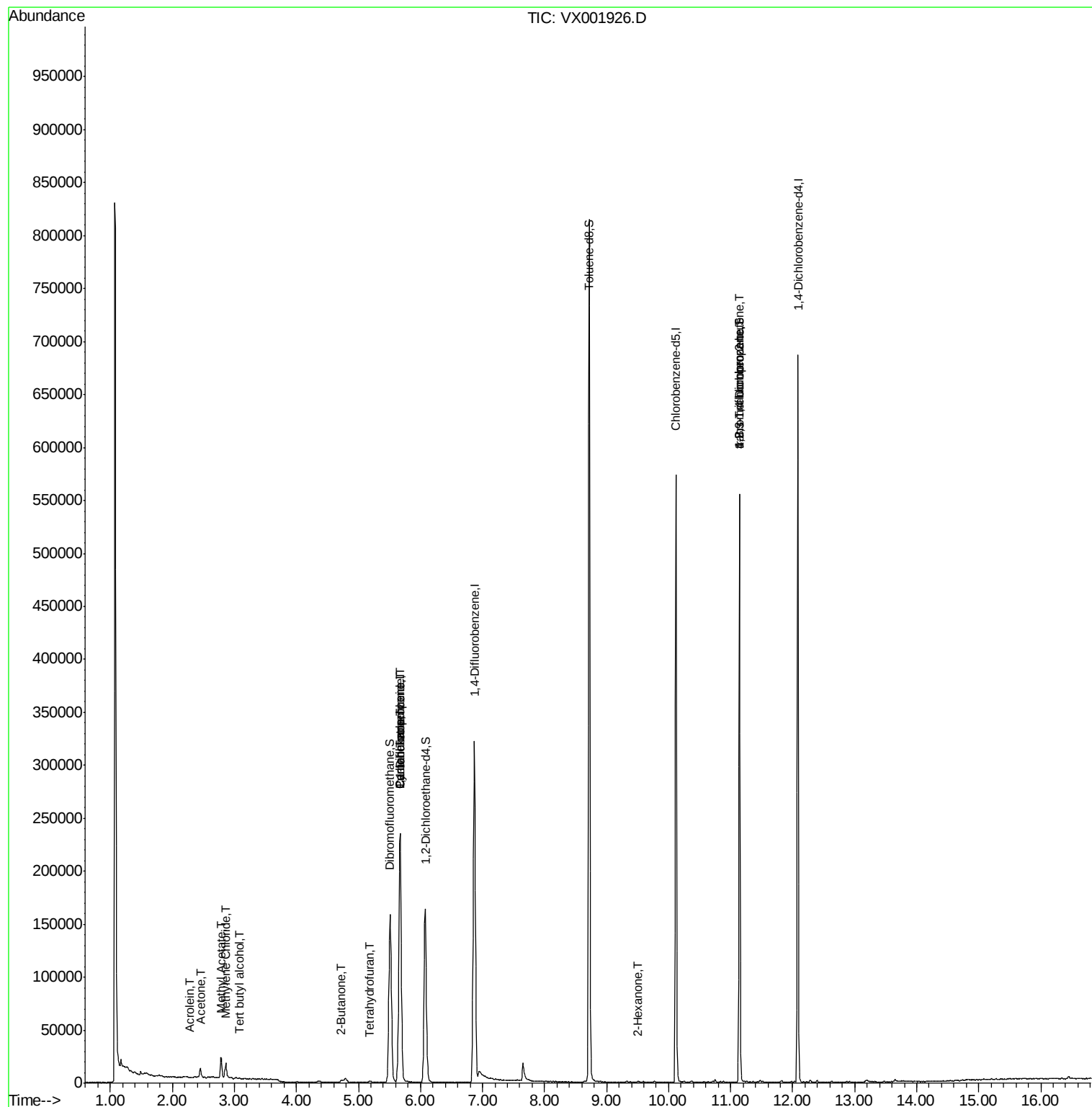
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 5) Bromomethane                | 1.62  | 94   | 56       | Below Cal | #     | 1      |
| 11) Tert butyl alcohol         | 3.07  | 59   | 584      | 0.99      | ug/l  | 99     |
| 13) Acrolein                   | 2.29  | 56   | 150      | 0.36      | ug/l  | 94     |
| 16) Acetone                    | 2.45  | 43   | 8895     | 6.79      | ug/l  | 96     |
| 18) Methyl Acetate             | 2.78  | 43   | 23335    | 6.10      | ug/l  | 99     |
| 20) Methylene Chloride         | 2.86  | 84   | 6389     | 2.28      | ug/l  | 97     |
| 25) 2-Butanone                 | 4.71  | 43   | 3811     | 1.90      | ug/l  | # 89   |
| 29) Tetrahydrofuran            | 5.18  | 42   | 1104     | 0.84      | ug/l  | # 63   |
| 31) Cyclohexane                | 5.67  | 56   | 4204     | 1.00      | ug/l  | # 13   |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 14940    | 3.86      | ug/l  | # 48   |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 21297    | 5.25      | ug/l  | # 18   |
| 59) 2-Hexanone                 | 9.51  | 43   | 675      | 0.24      | ug/l  | 82     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 65469    | 22.40     | ug/l  | # 39   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 65469    | 65.64     | ug/l  | # 10   |

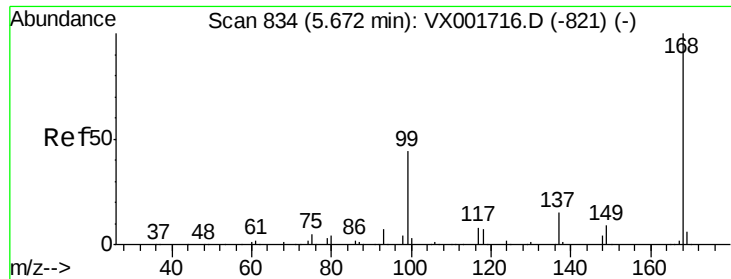
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: May 23 06:47:27 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: VX001926.D

Acq: 23 May 2018 06:19

Instrument :

MSVOA\_X

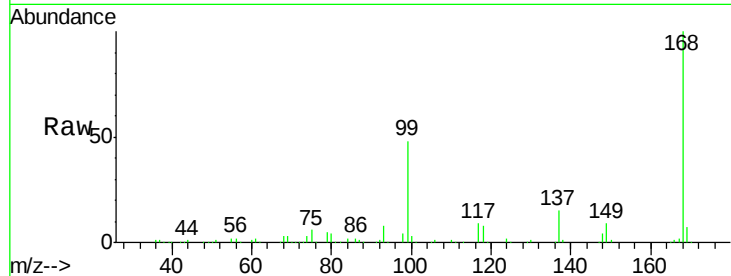
ClientSampled :

Tot Ion:168 Resp: 248741

Ion Ratio Lower Upper

168 100

99 47.5 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

80000

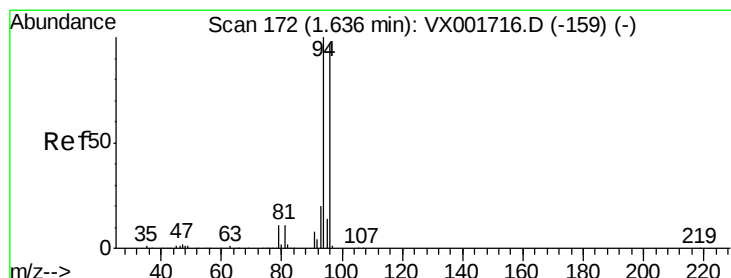
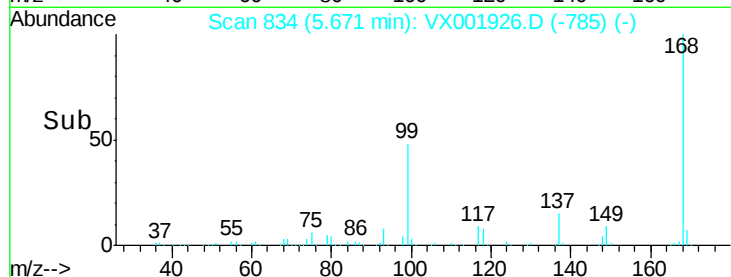
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: Below Cal

RT: 1.62 min Scan# 169

Delta R.T. -0.02 min

Lab File: VX001926.D

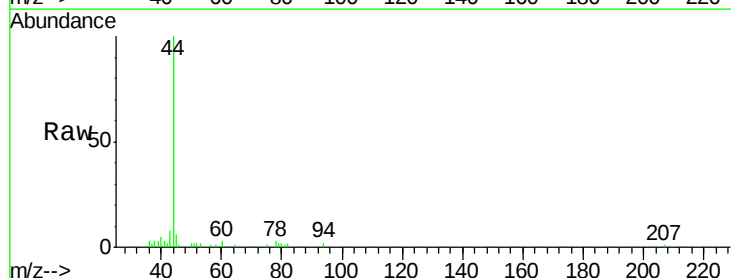
Acq: 23 May 2018 06:19

Tgt Ion: 94 Resp: 56

Ion Ratio Lower Upper

94 100

96 0.0 77.4 116.0#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.62

100

80

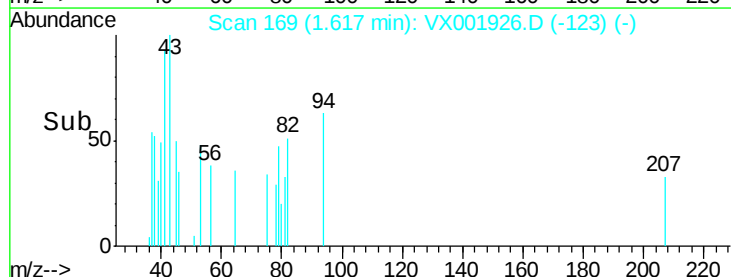
60

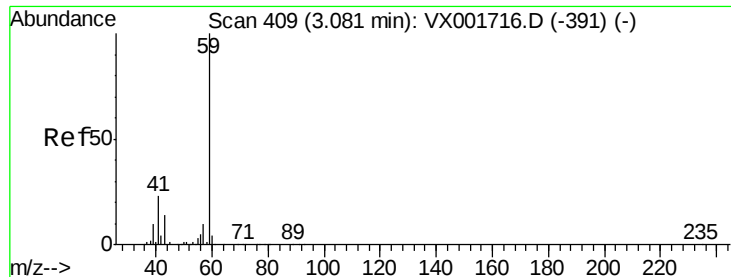
40

20

0

Time--> 1.61 1.62 1.63

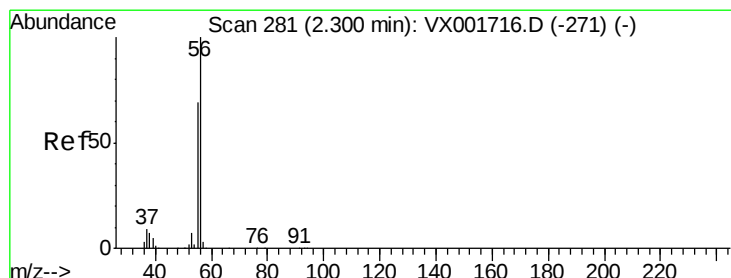
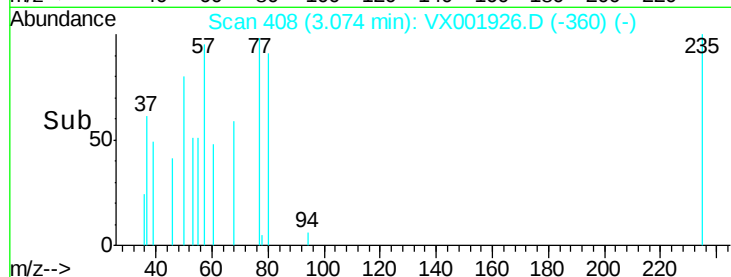
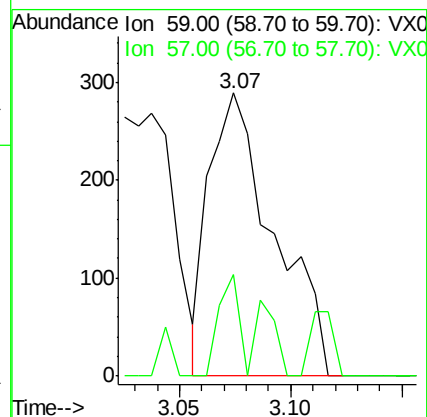
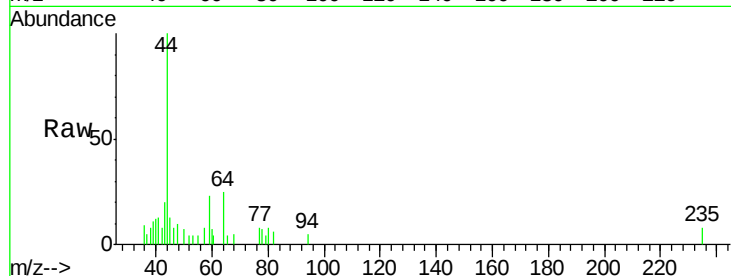




#11  
Tert butvl alcohol  
Concen: 0.99 ug/l  
RT: 3.07 min Scan# 408  
Delta R.T. -0.01 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

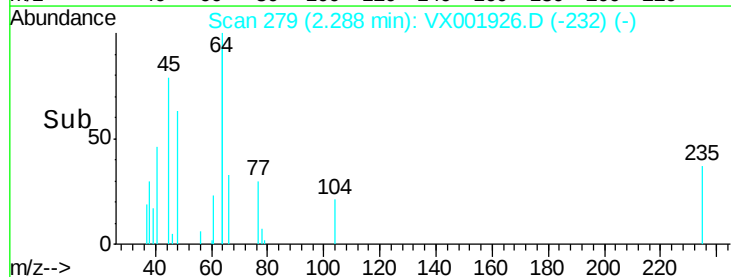
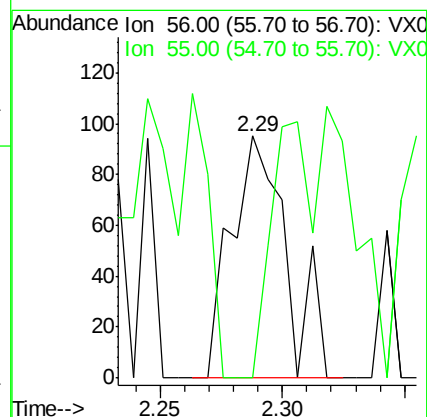
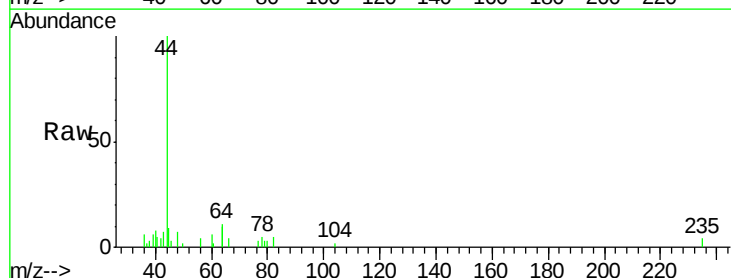
Instrument :  
MSVOA\_X  
ClientSampleId :

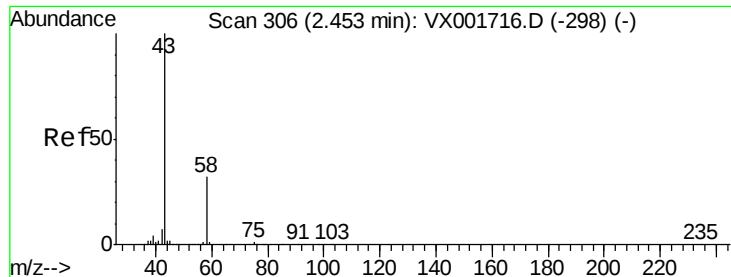
Tot Ion: 59 Resp: 584  
Ion Ratio Lower Upper  
59 100  
57 11.0 8.5 12.7



#13  
Acrolein  
Concen: 0.36 ug/l  
RT: 2.29 min Scan# 279  
Delta R.T. -0.01 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

Tgt Ion: 56 Resp: 150  
Ion Ratio Lower Upper  
56 100  
55 75.3 56.2 84.2





#16

Acetone

Concen: 6.79 ug/l

RT: 2.45 min Scan# 306

Delta R.T. -0.00 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

Instrument :

MSVOA\_X

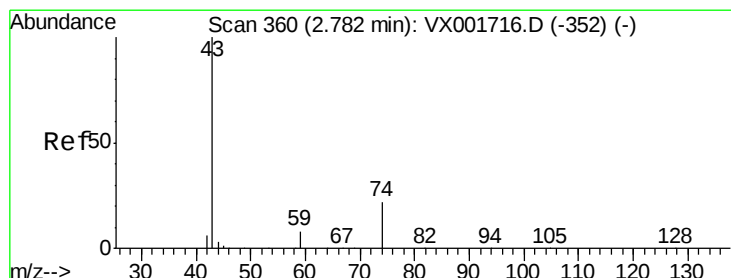
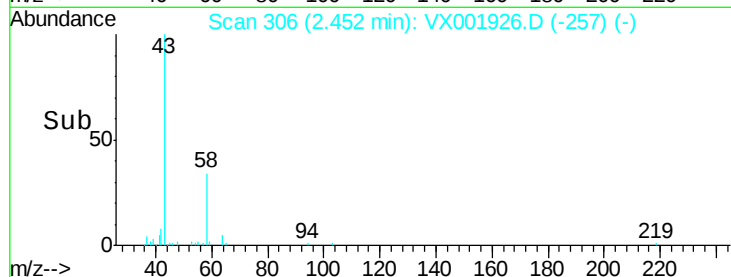
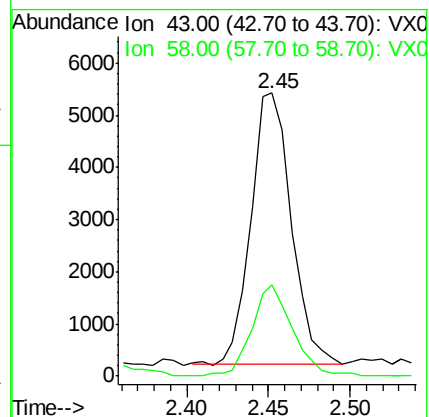
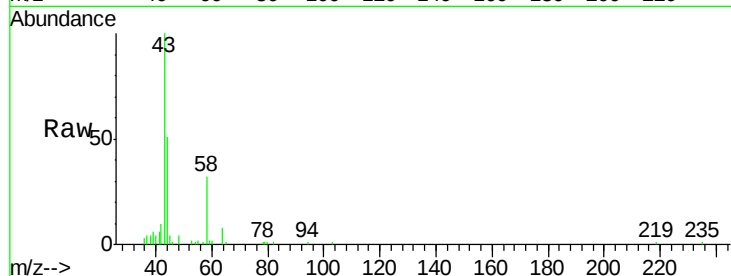
ClientSampleId :

Tot Ion: 43 Resp: 8895

Ion Ratio Lower Upper

43 100

58 33.8 25.3 37.9



#18

Methyl Acetate

Concen: 6.10 ug/l

RT: 2.78 min Scan# 360

Delta R.T. -0.00 min

Lab File: VX001926.D

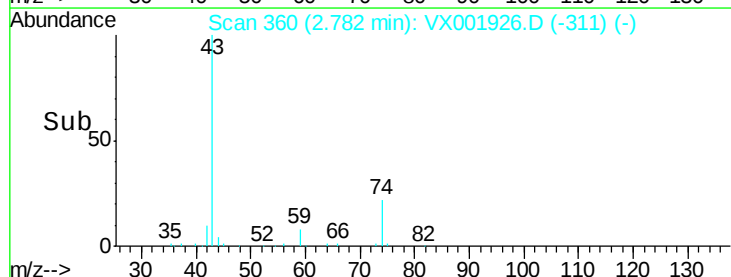
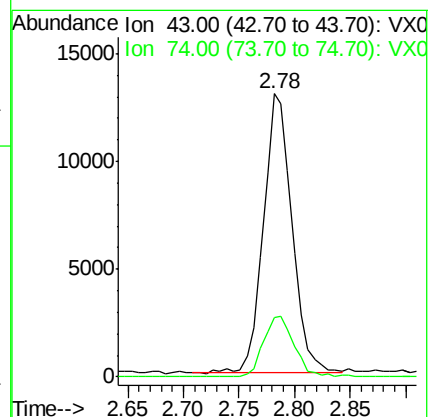
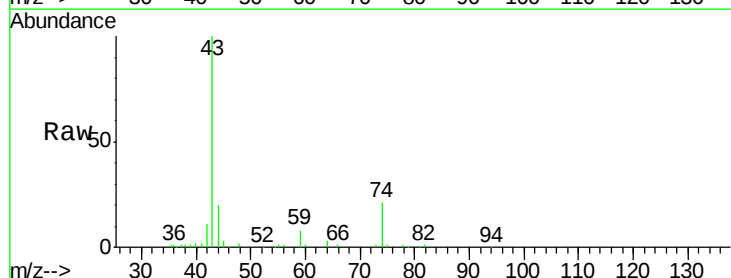
Acq: 23 May 2018 06:19

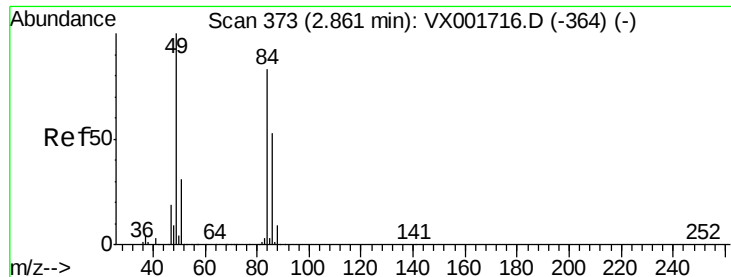
Tgt Ion: 43 Resp: 23335

Ion Ratio Lower Upper

43 100

74 23.0 18.2 27.2

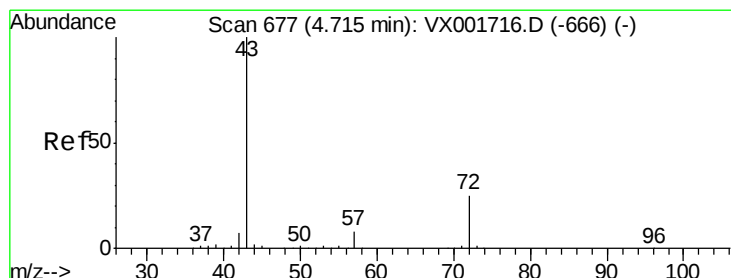
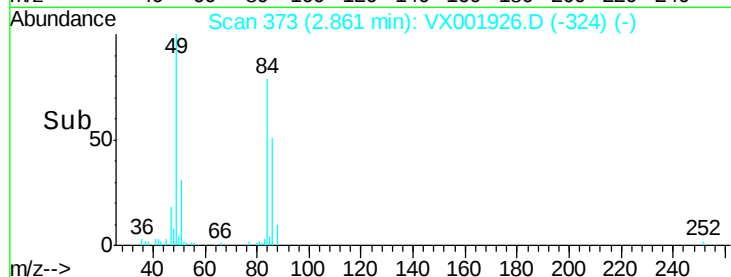
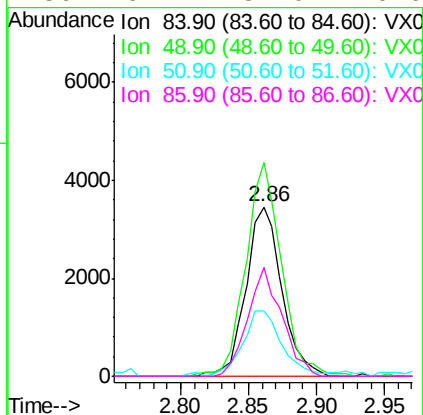
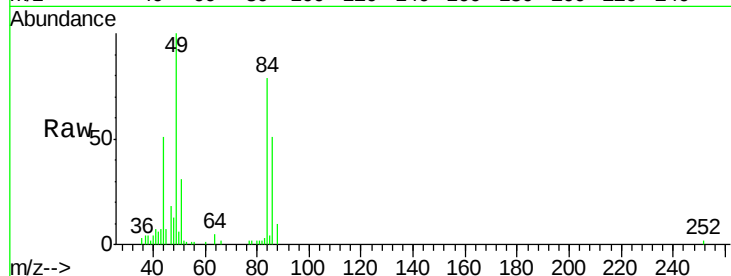




#20  
Methvlene Chloride  
Concen: 2.28 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. -0.00 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

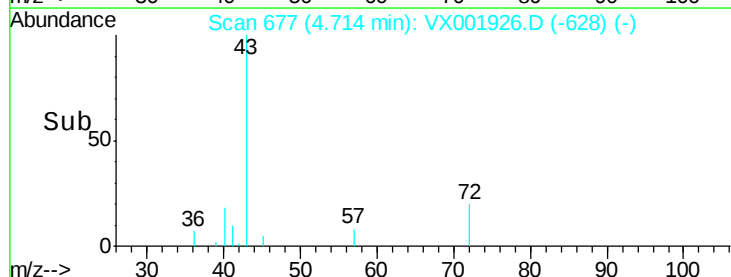
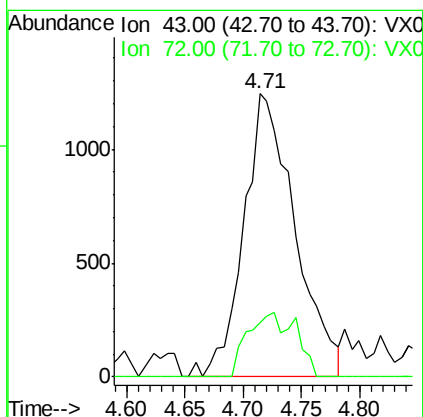
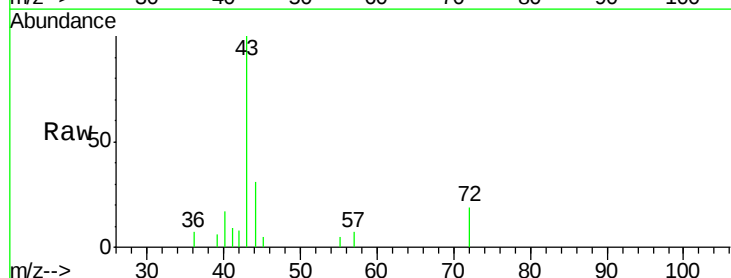
Instrument :  
MSVOA\_X  
ClientSampleId :

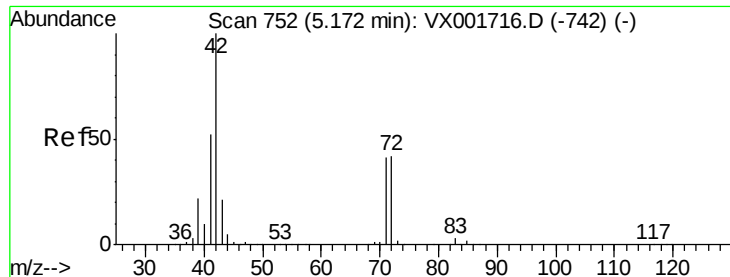
Tot Ion: 84 Resp: 6389  
Ion Ratio Lower Upper  
84 100  
49 126.4 96.3 144.5  
51 36.9 29.8 44.6  
86 64.4 51.0 76.6



#25  
2-Butanone  
Concen: 1.90 ug/l  
RT: 4.71 min Scan# 677  
Delta R.T. -0.00 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

Tgt Ion: 43 Resp: 3811  
Ion Ratio Lower Upper  
43 100  
72 19.1 19.8 29.6#





#29

Tetrahydrofuran

Concen: 0.84 ug/l

RT: 5.18 min Scan# 753

Delta R.T. 0.01 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

Instrument :

MSVOA\_X

ClientSampleId :

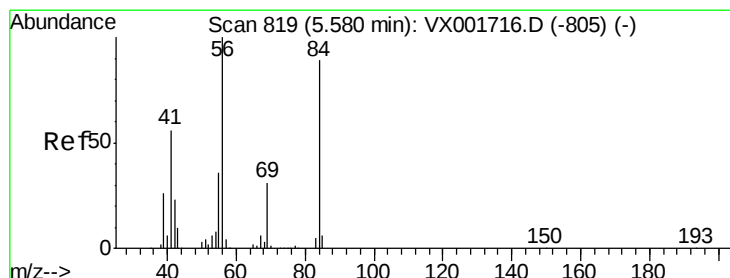
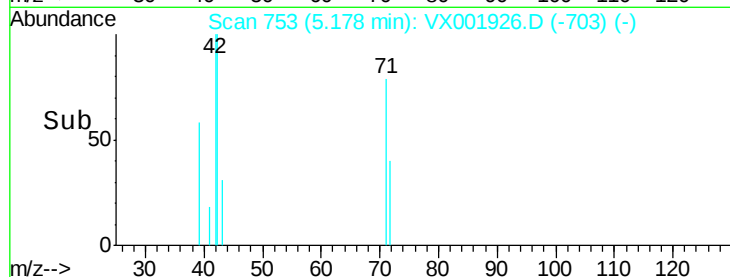
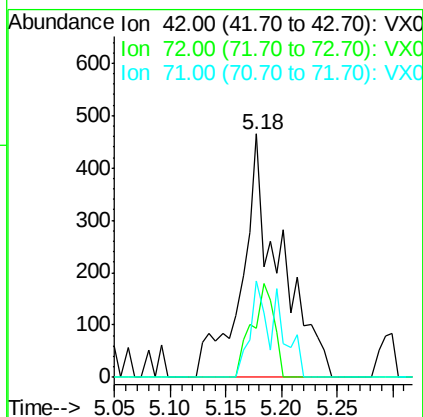
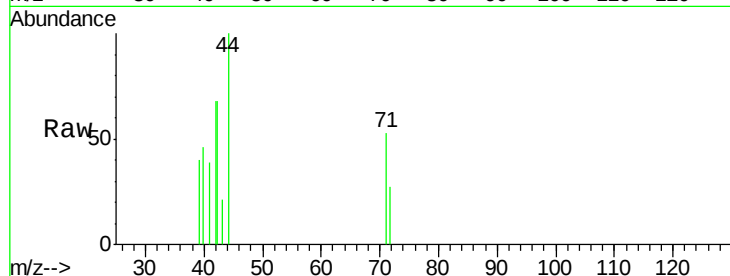
Tot Ion: 42 Resp: 1104

Ion Ratio Lower Upper

42 100

72 22.6 35.4 53.2#

71 16.0 33.2 49.8#



#31

Cyclohexane

Concen: 1.00 ug/l

RT: 5.67 min Scan# 834

Delta R.T. 0.09 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

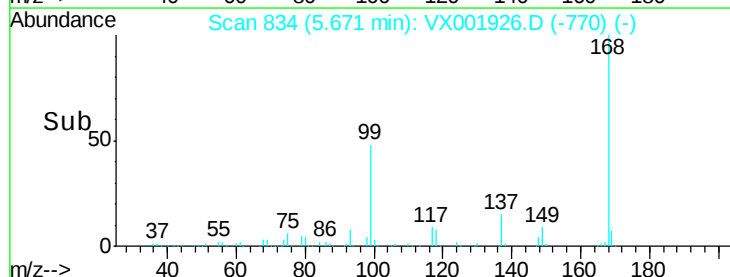
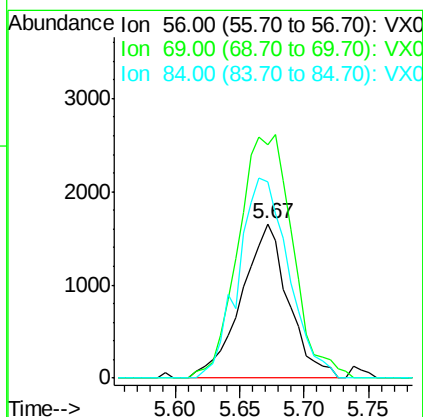
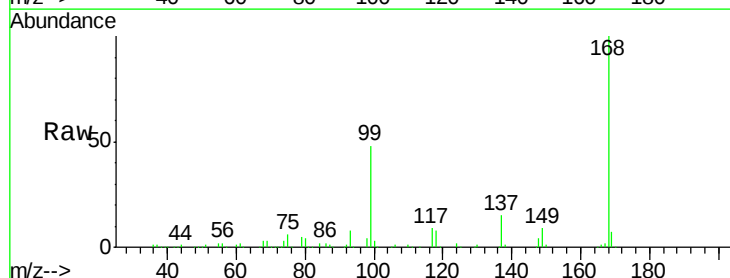
Tgt Ion: 56 Resp: 4204

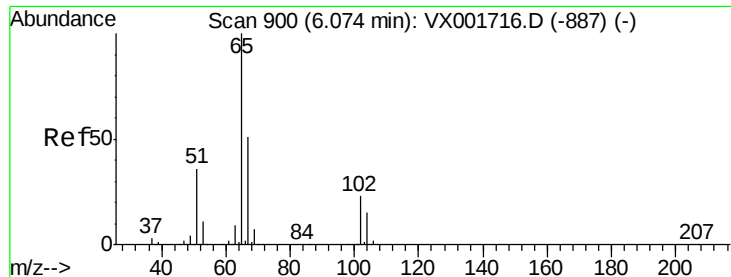
Ion Ratio Lower Upper

56 100

69 151.2 25.0 37.6#

84 127.2 71.0 106.4#





#33

1,2-Dichloroethane-d4

Concen: 47.04 ug/l

RT: 6.08 min Scan# 901

Delta R.T. 0.01 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

Instrument :

MSVOA\_X

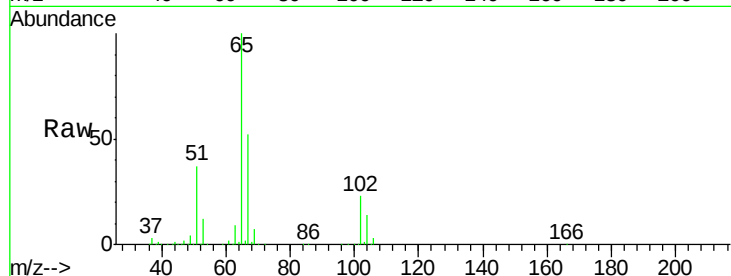
ClientSampleId :

Tot Ion: 65 Resp: 156828

Ion Ratio Lower Upper

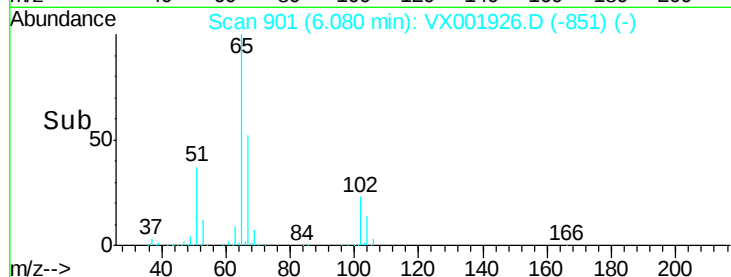
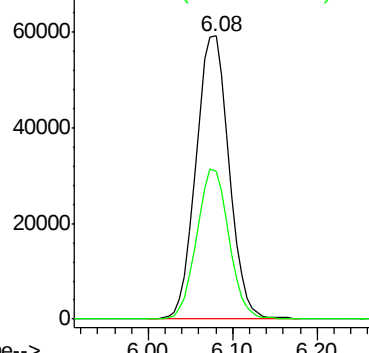
65 100

67 51.8 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: VX001926.D

Acq: 23 May 2018 06:19

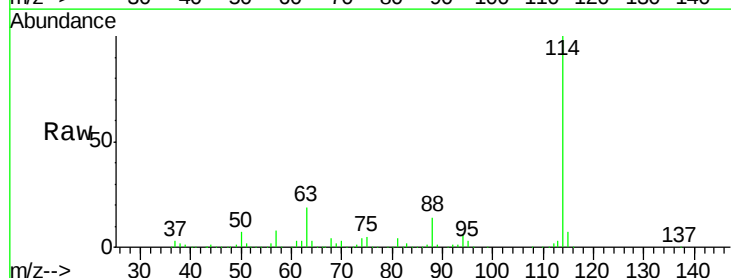
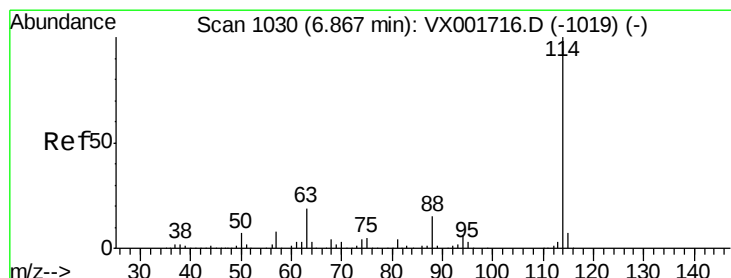
Tgt Ion: 114 Resp: 336484

Ion Ratio Lower Upper

114 100

63 19.3 0.0 37.0

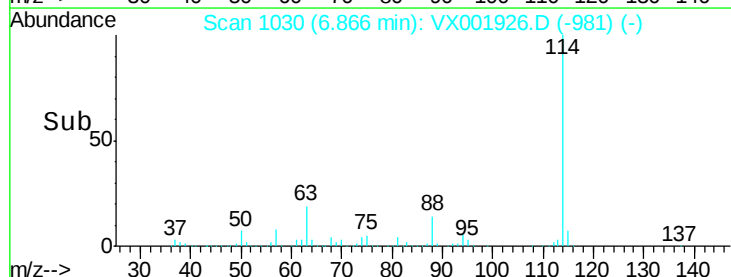
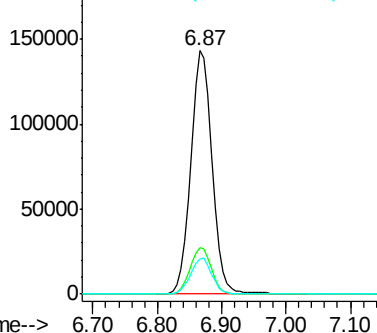
88 14.4 0.0 29.8

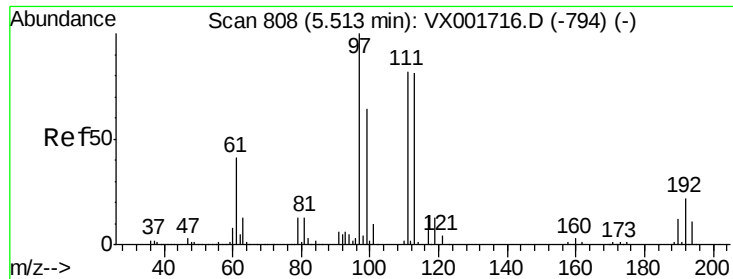


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 45.99 ug/l

RT: 5.51 min Scan# 808

Delta R.T. -0.00 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

Instrument :

MSVOA\_X

ClientSampled :

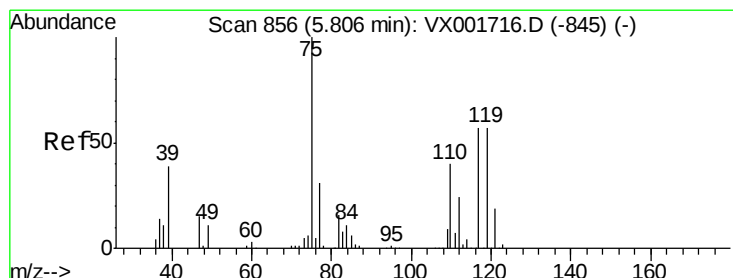
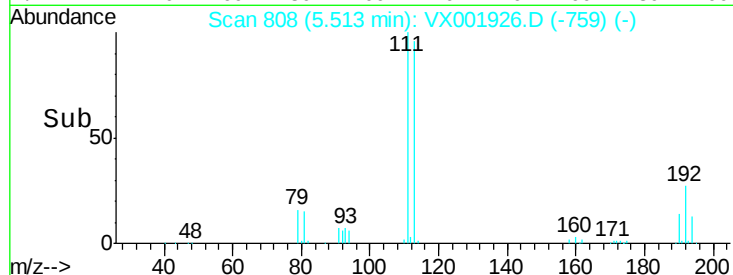
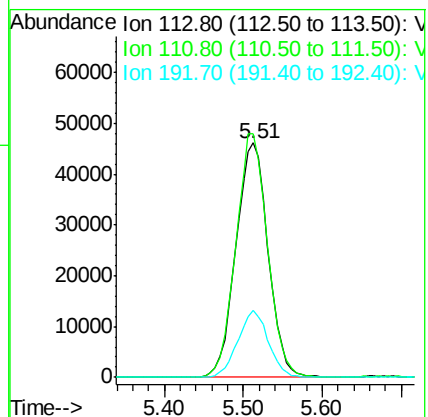
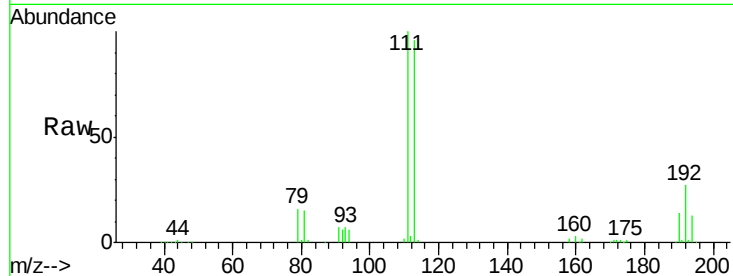
Tot Ion:113 Resp: 130586

Ion Ratio Lower Upper

113 100

111 102.5 82.0 123.0

192 27.1 21.6 32.4



#36

1,1-Dichloropropene

Concen: 3.86 ug/l

RT: 5.67 min Scan# 834

Delta R.T. -0.13 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

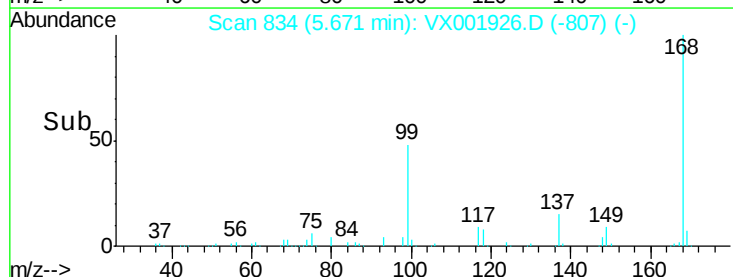
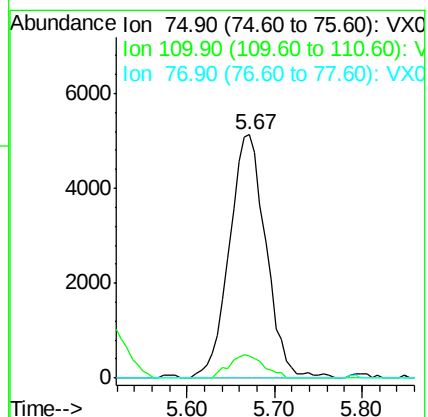
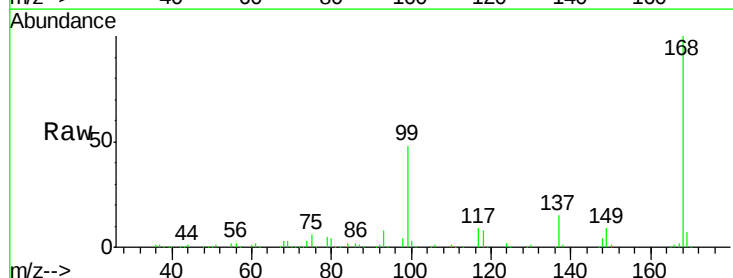
Tgt Ion: 75 Resp: 14940

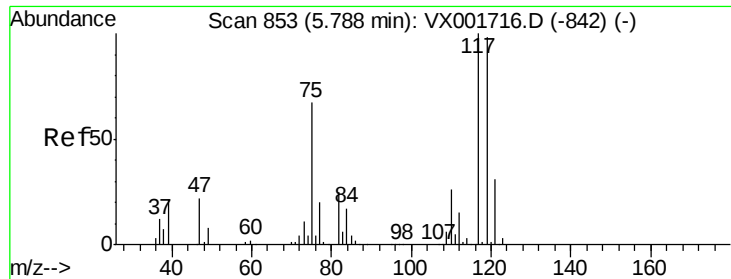
Ion Ratio Lower Upper

75 100

110 9.0 19.1 57.1#

77 0.0 24.6 37.0#





#38

Carbon Tetrachloride

Concen: 5.25 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

Instrument :

MSVOA\_X

ClientSampleId :

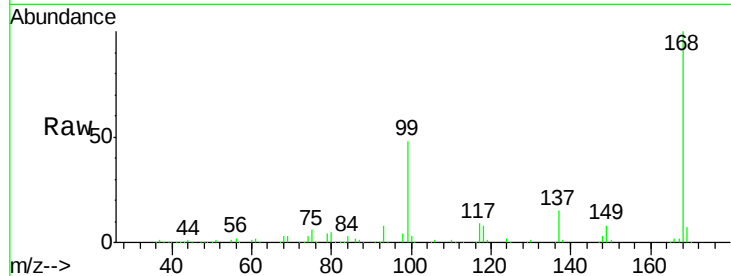
Tot Ion:117 Resp: 21297

Ion Ratio Lower Upper

117 100

119 7.9 77.6 116.4#

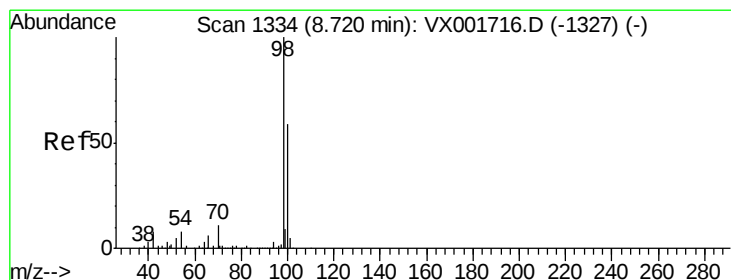
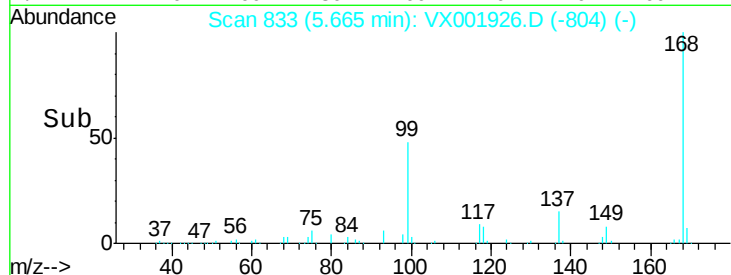
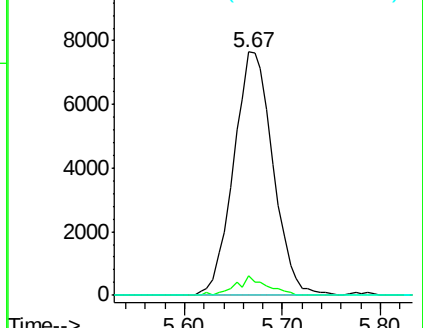
121 0.0 24.6 36.8#



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



#50

Toluene-d8

Concen: 47.00 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. -0.00 min

Lab File: VX001926.D

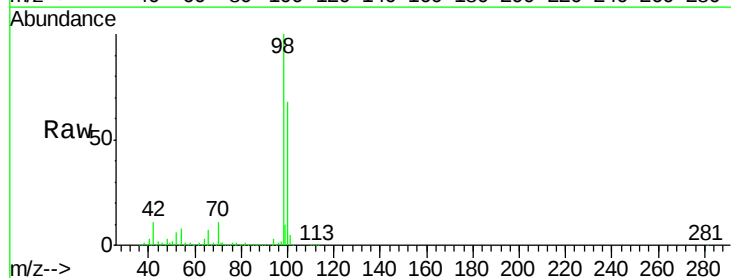
Acq: 23 May 2018 06:19

Tgt Ion: 98 Resp: 478019

Ion Ratio Lower Upper

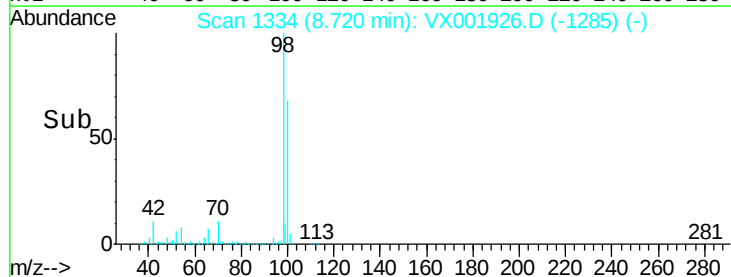
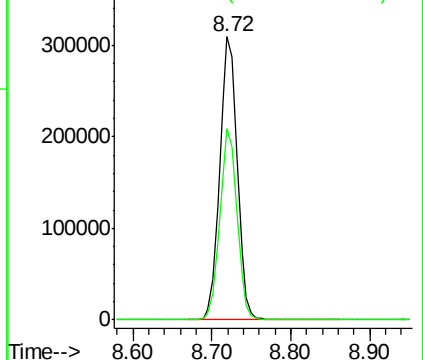
98 100

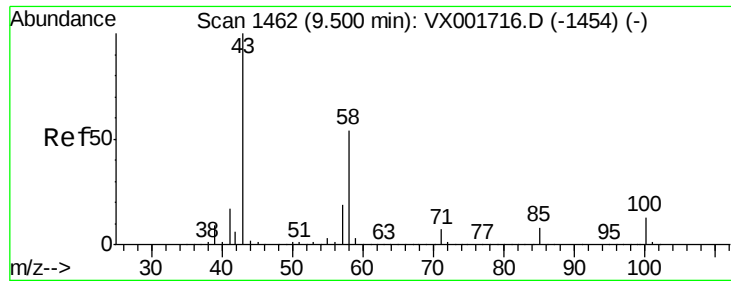
100 66.5 54.0 81.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

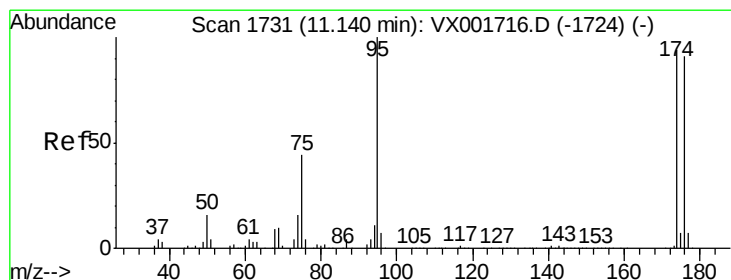
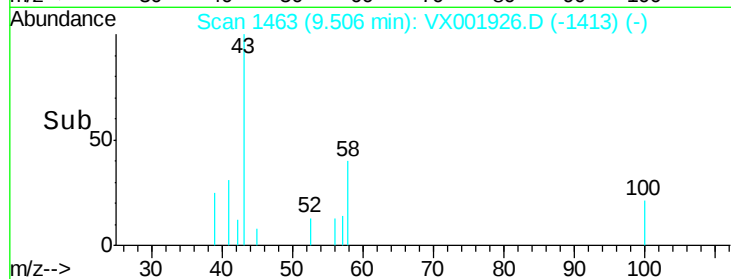
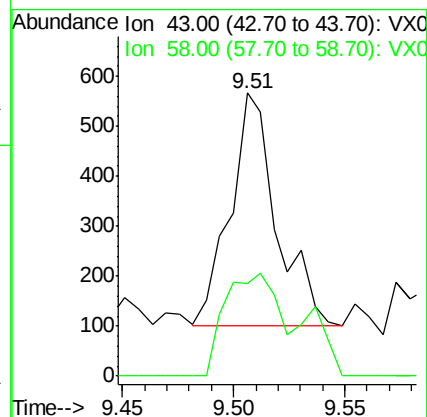
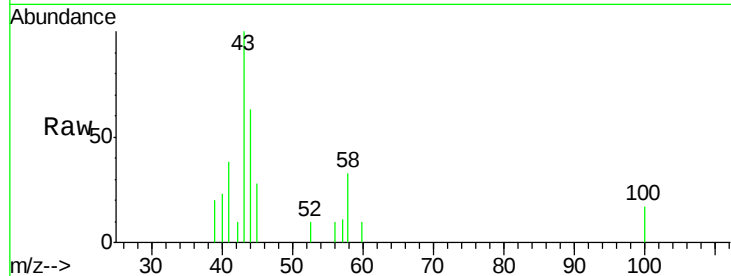




#59  
2-Hexanone  
Concen: 0.24 ug/l  
RT: 9.51 min Scan# 1463  
Delta R.T. 0.01 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

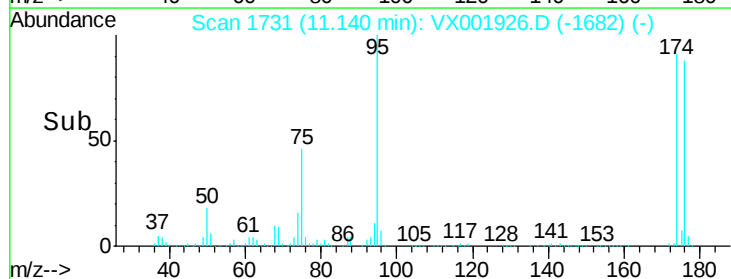
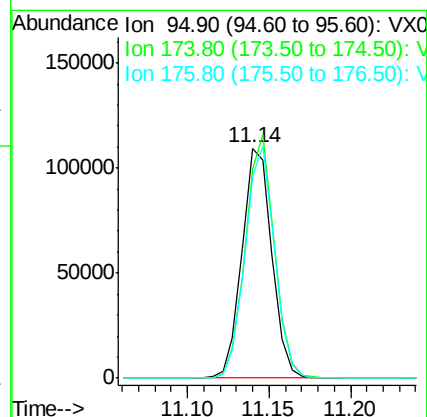
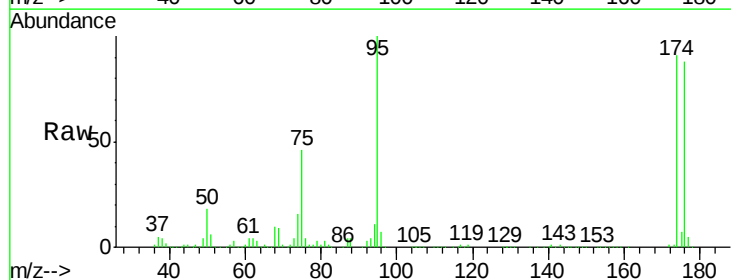
Instrument :  
MSVOA\_X  
ClientSampleId :

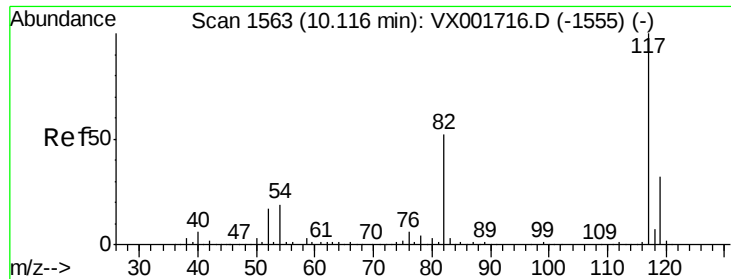
Tot Ion: 43 Resp: 675  
Ion Ratio Lower Upper  
43 100  
58 68.4 27.7 83.1



#62  
4-Bromofluorobenzene  
Concen: 38.08 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. -0.00 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

Tgt Ion: 95 Resp: 139452  
Ion Ratio Lower Upper  
95 100  
174 103.4 0.0 201.8  
176 99.4 0.0 196.8

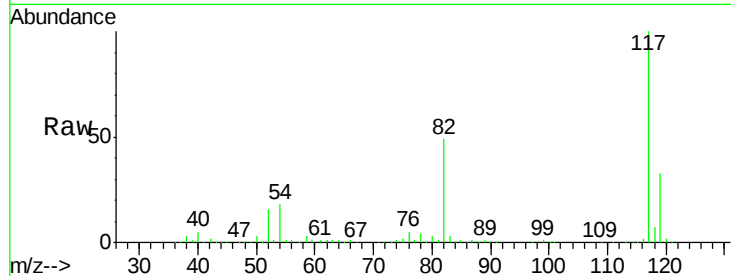




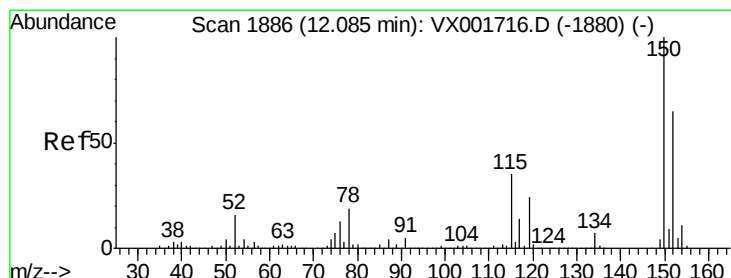
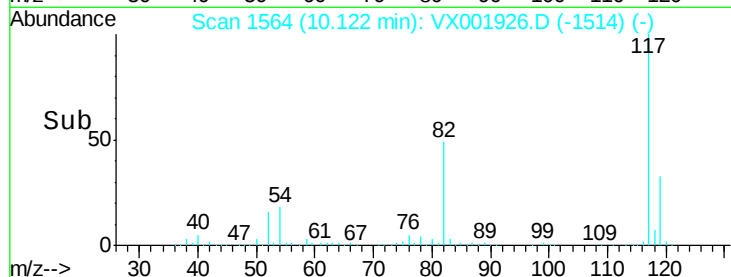
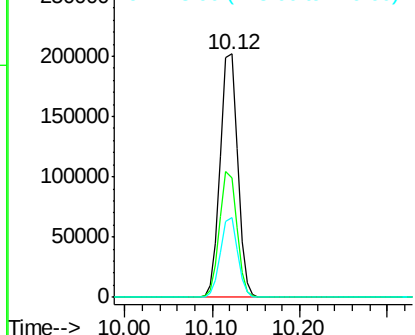
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1564  
Delta R.T. 0.01 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:117 Resp: 278712  
Ion Ratio Lower Upper  
117 100  
82 49.1 41.4 62.2  
119 32.7 25.6 38.4

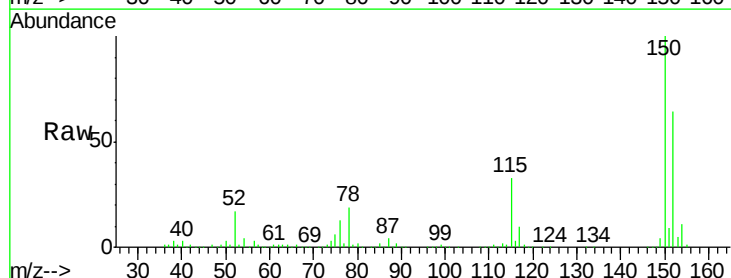


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

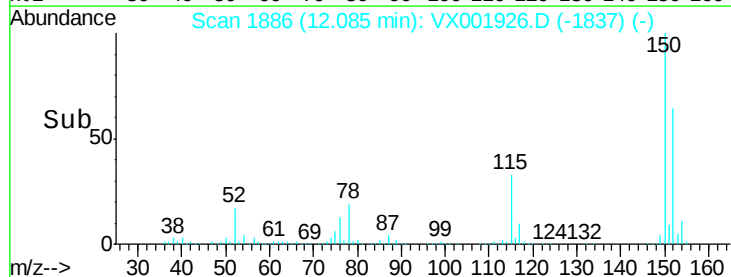
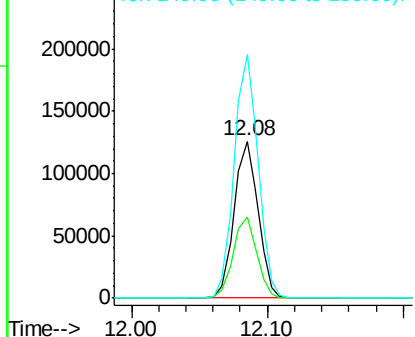


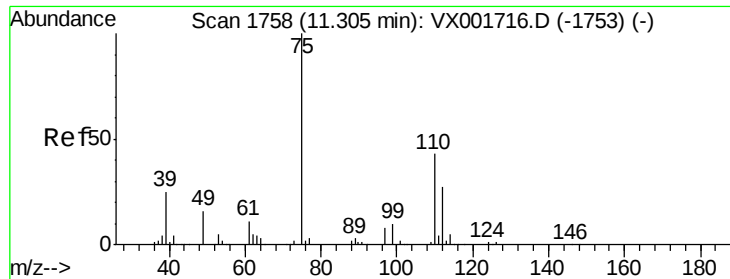
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.00 ug/l  
RT: 12.08 min Scan# 1886  
Delta R.T. -0.00 min  
Lab File: VX001926.D  
Acq: 23 May 2018 06:19

Tgt Ion:152 Resp: 153724  
Ion Ratio Lower Upper  
152 100  
115 51.2 37.4 112.2  
150 155.5 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: 22.40 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

Instrument :

MSVOA\_X

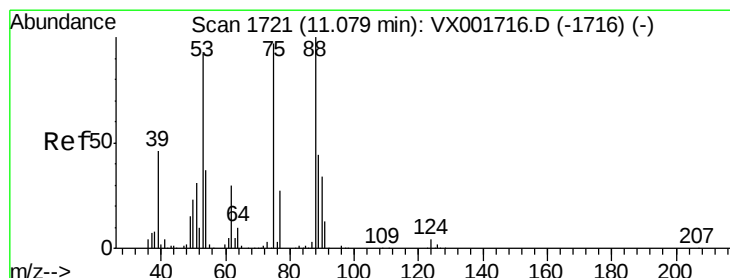
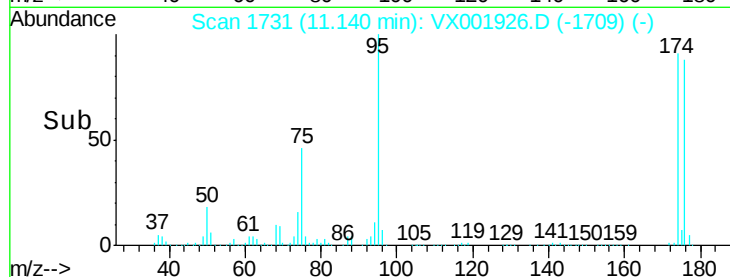
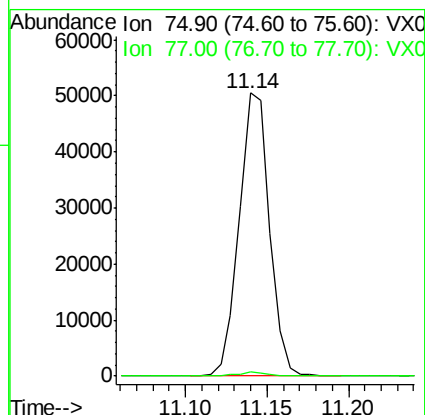
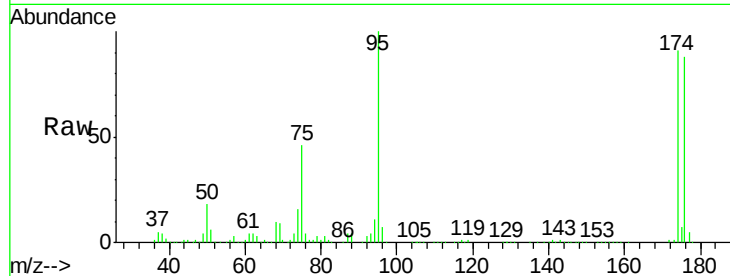
ClientSampleId :

Tot Ion: 75 Resp: 65469

Ion Ratio Lower Upper

75 100

77 1.3 18.9 56.7#



#81

trans-1,4-Dichloro-2-butene

Concen: 65.64 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX001926.D

Acq: 23 May 2018 06:19

Tgt Ion: 75 Resp: 65469

Ion Ratio Lower Upper

75 100

53 0.1 79.4 119.2#

89 0.0 38.8 58.2#

