

Data File : VX001849.D

Acq On : 19 May 2018 02:27

Operator : JC/MD

Sample : PB109413TB 5X

Misc : 5.0mL/MSVOA\_X/WATER

ALS Vial : 32 Sample Multiplier: 1

Instrument :

MSVOA\_X

ClientSampleId :

PB109413TB 5X

Quant Time: May 21 03:18:39 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  | 287114   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 388130   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 285741   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 145567   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 155041   | 40.29 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 80.58% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 136996   | 41.83 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 83.66% |      |
| 50) Toluene-d8            | 8.72   | 98  | 492352   | 41.97 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 83.94% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 129811   | 30.73 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 61.46% |      |

## Target Compounds

|                                |       |     |       |       |      | Qvalue |
|--------------------------------|-------|-----|-------|-------|------|--------|
| 3) Chloromethane               | 1.32  | 50  | 662   | 0.21  | ug/l | # 86   |
| 5) Bromomethane                | 1.61  | 94  | 57    | Below | Cal  | # 1    |
| 6) Chloroethane                | 1.62  | 64  | 1058  | 0.50  | ug/l | # 62   |
| 8) Diethyl Ether               | 2.20  | 74  | 1065  | 0.53  | ug/l | 73     |
| 10) Methyl Iodide              | 2.53  | 142 | 2664  | 0.98  | ug/l | 100    |
| 11) Tert butyl alcohol         | 3.03  | 59  | 1173  | 1.72  | ug/l | # 72   |
| 13) Acrolein                   | 2.29  | 56  | 229   | 0.47  | ug/l | # 37   |
| 15) Acrylonitrile              | 3.15  | 53  | 638   | 0.37  | ug/l | 90     |
| 16) Acetone                    | 2.45  | 43  | 7625  | 5.04  | ug/l | 97     |
| 17) Carbon Disulfide           | 2.57  | 76  | 1635  | 0.22  | ug/l | 99     |
| 18) Methyl Acetate             | 2.78  | 43  | 23806 | 5.39  | ug/l | 99     |
| 20) Methylene Chloride         | 2.86  | 84  | 6832  | 2.11  | ug/l | 95     |
| 25) 2-Butanone                 | 4.72  | 43  | 3257  | 1.41  | ug/l | 100    |
| 29) Tetrahydrofuran            | 5.17  | 42  | 1015  | 0.67  | ug/l | # 42   |
| 38) Carbon Tetrachloride       | 5.67  | 117 | 23400 | 5.00  | ug/l | # 15   |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75  | 60577 | 21.88 | ug/l | # 39   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75  | 60577 | 64.21 | ug/l | # 10   |
| 93) 1,2,4-Trichlorobenzene     | 13.65 | 180 | 969   | 0.23  | ug/l | 98     |
| 96) 1,2,3-Trichlorobenzene     | 14.02 | 180 | 865   | 0.21  | ug/l | 89     |

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

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Misc : 5.0mL/MSVOA\_X/WATER

ALS Vial : 32 Sample Multiplier: 1

Instrument :

MSVOA\_X

ClientSampleId :

PB109413TB 5X

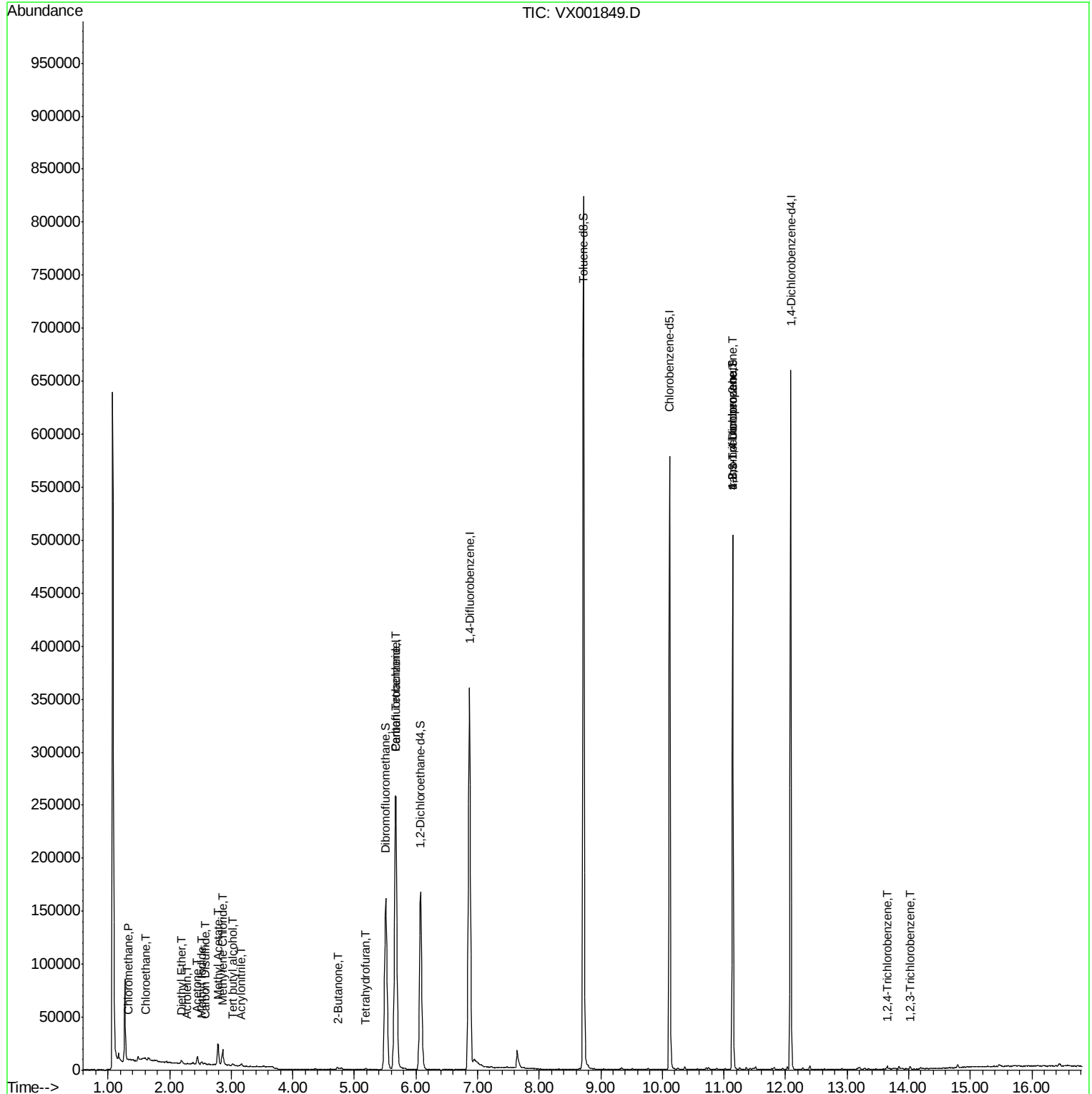
Quant Time: May 21 03:18:39 2018

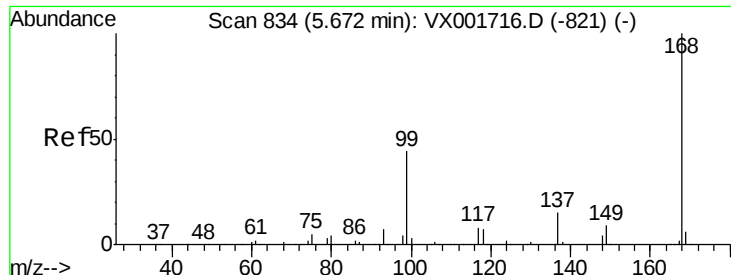
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X051518W.M

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: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampleId :

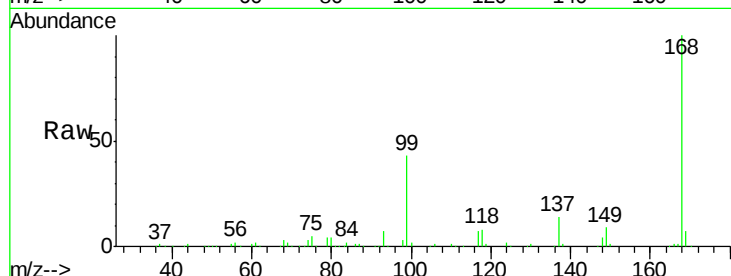
PB109413TB 5X

Tgt Ion:168 Resp: 287114

Ion Ratio Lower Upper

168 100

99 42.9 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

120000

100000

80000

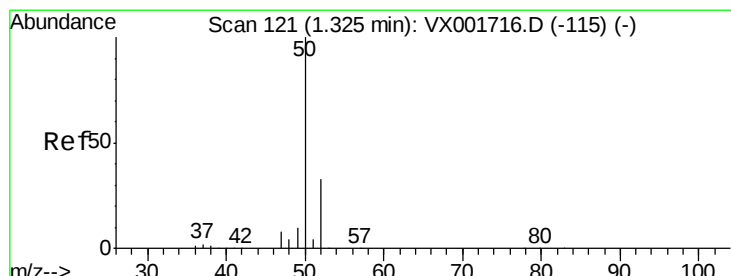
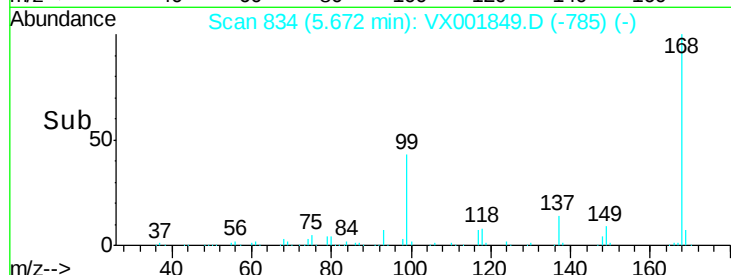
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.21 ug/l

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX001849.D

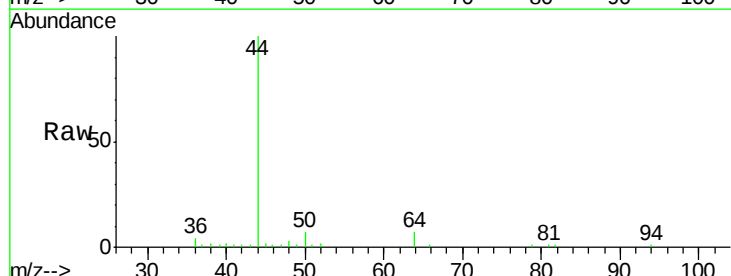
Acq: 19 May 2018 02:27

Tgt Ion: 50 Resp: 662

Ion Ratio Lower Upper

50 100

52 25.2 26.3 39.5#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

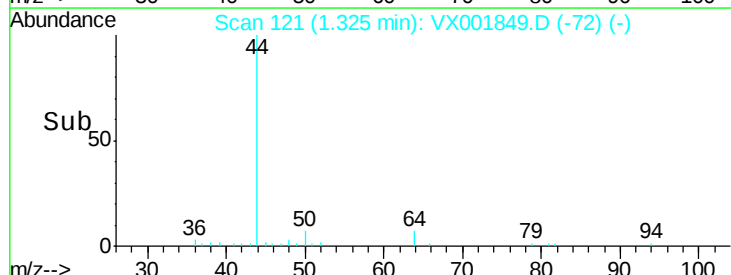
1.32

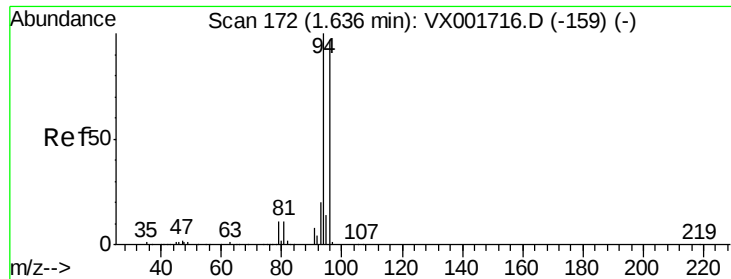
1000

500

0

Time--> 1.30 1.35 1.40





#5

Bromomethane

Concen: Below Cal

RT: 1.61 min Scan# 168

Delta R.T. -0.02 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampleId :

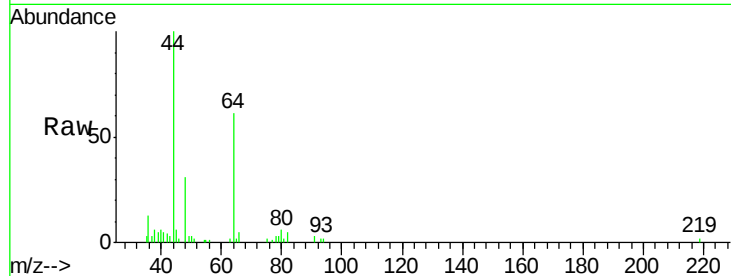
PB109413TB 5X

Tgt Ion: 94 Resp: 57

Ion Ratio Lower Upper

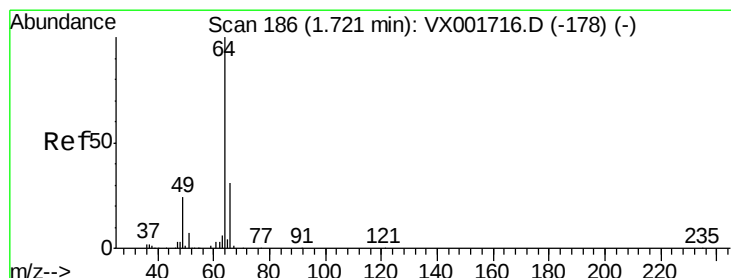
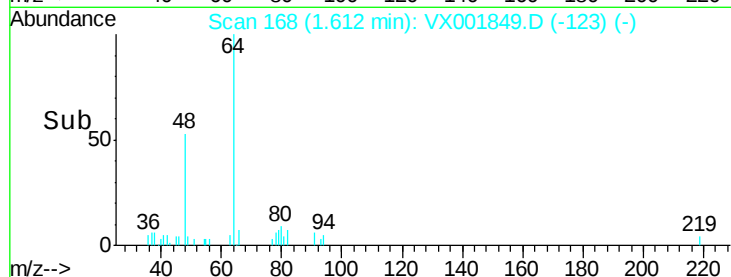
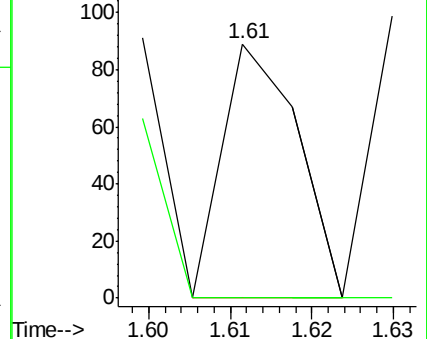
94 100

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



#6

Chloroethane

Concen: 0.50 ug/l

RT: 1.62 min Scan# 169

Delta R.T. -0.10 min

Lab File: VX001849.D

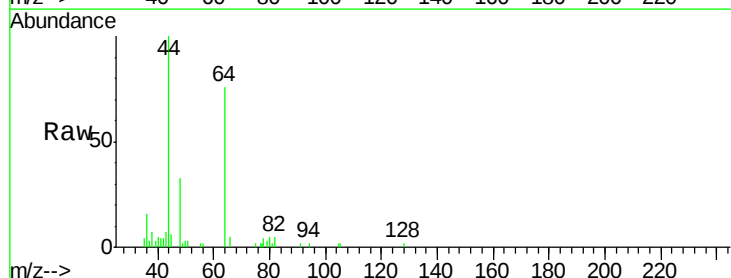
Acq: 19 May 2018 02:27

Tgt Ion: 64 Resp: 1058

Ion Ratio Lower Upper

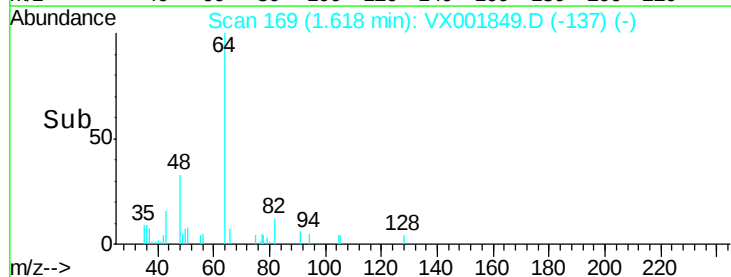
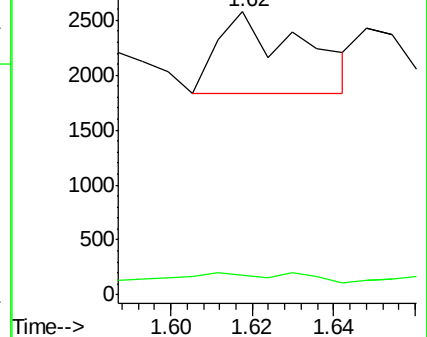
64 100

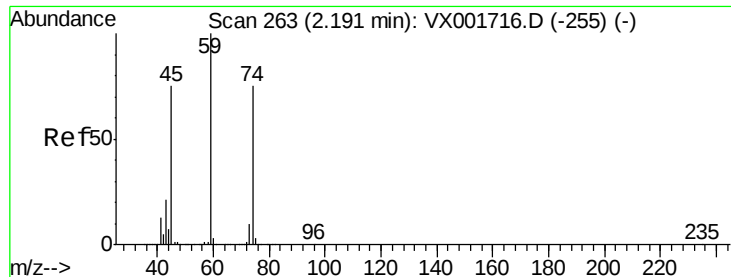
66 10.6 25.2 37.8#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0





#8

Diethyl Ether

Concen: 0.53 ug/l

RT: 2.20 min Scan# 264

Delta R.T. 0.01 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampled :

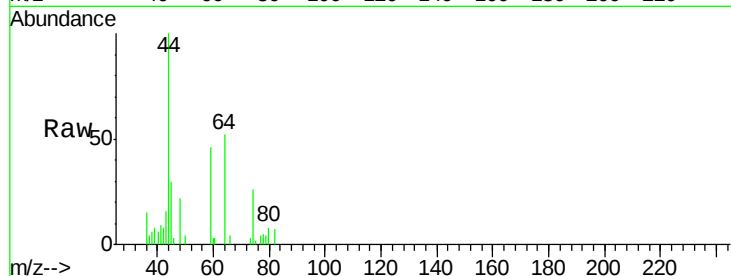
PB109413TB 5X

Tgt Ion: 74 Resp: 1065

Ion Ratio Lower Upper

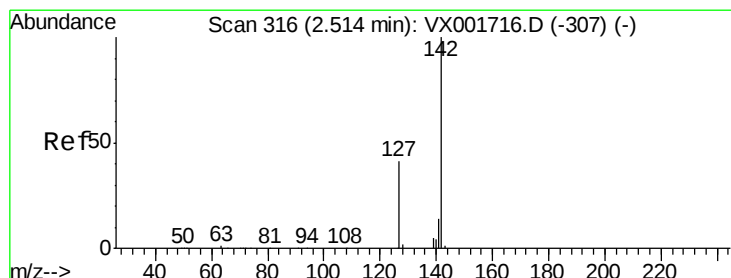
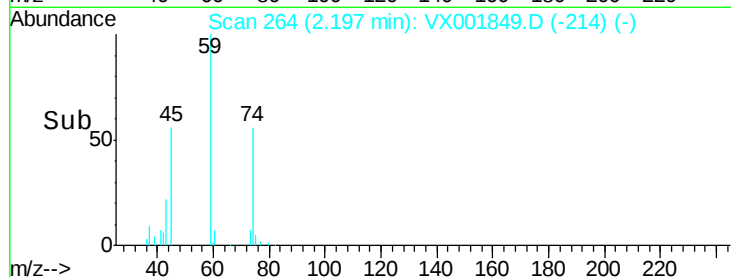
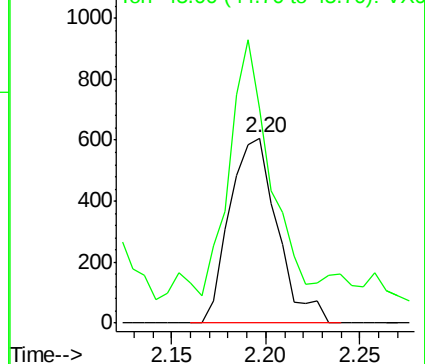
74 100

45 126.5 50.0 149.8



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0



#10

Methyl Iodide

Concen: 0.98 ug/l

RT: 2.53 min Scan# 318

Delta R.T. 0.01 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

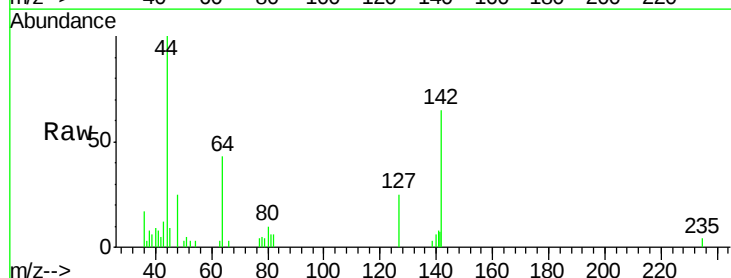
Tgt Ion: 142 Resp: 2664

Ion Ratio Lower Upper

142 100

127 40.8 32.5 48.7

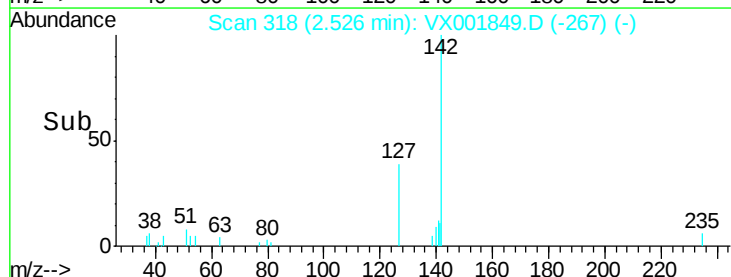
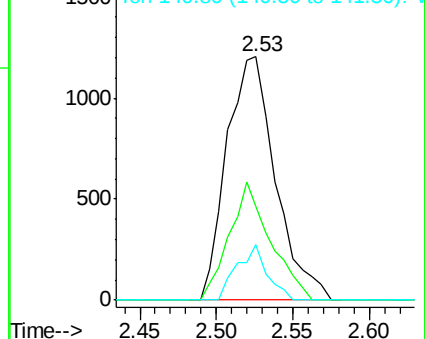
141 14.0 11.4 17.0

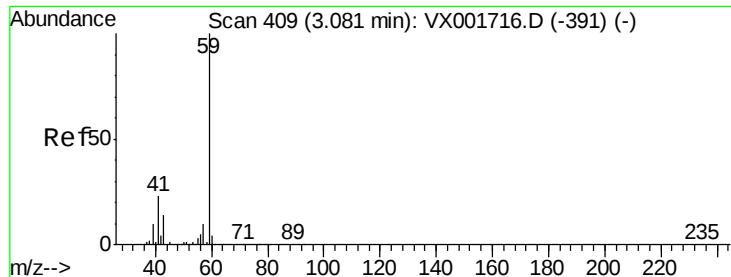


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

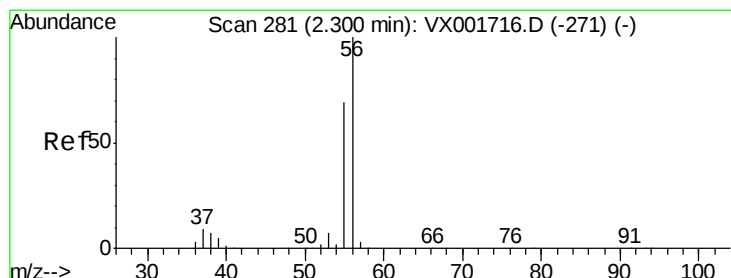
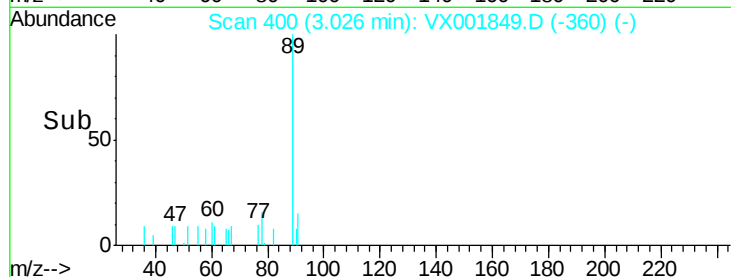
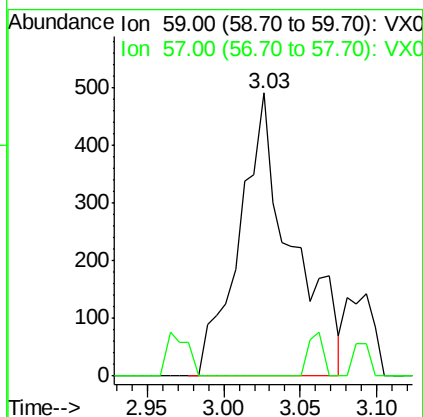
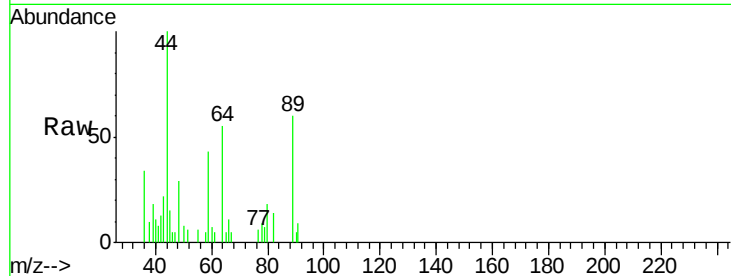




#11  
Tert butyl alcohol  
Concen: 1.72 ug/l  
RT: 3.03 min Scan# 400  
Delta R.T. -0.05 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

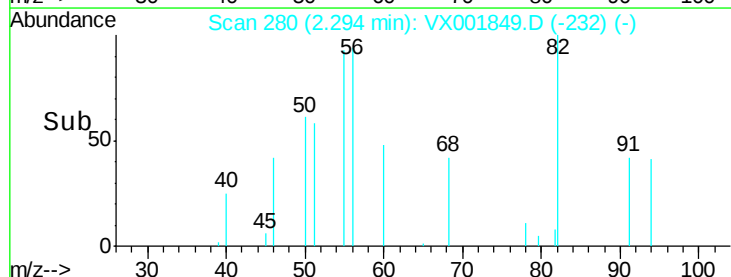
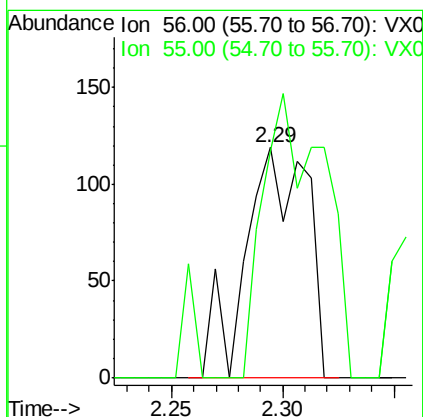
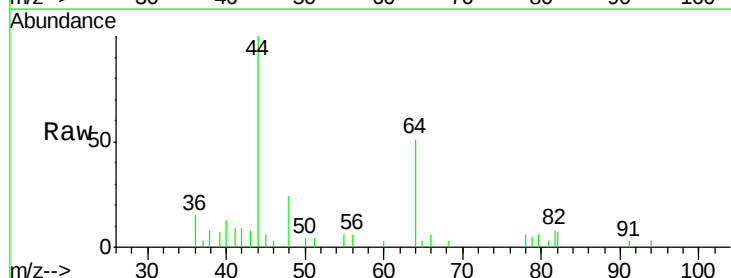
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB109413TB 5X

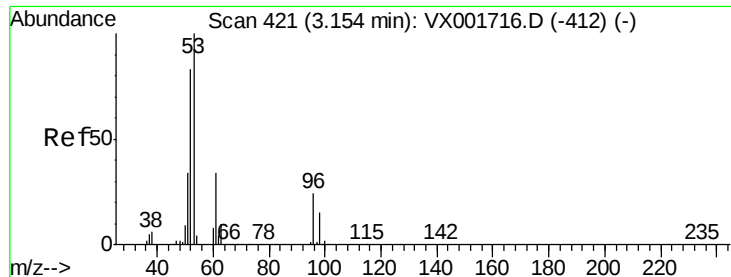
Tgt Ion: 59 Resp: 1173  
Ion Ratio Lower Upper  
59 100  
57 0.0 8.5 12.7#



#13  
Acrolein  
Concen: 0.47 ug/l  
RT: 2.29 min Scan# 280  
Delta R.T. -0.01 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

Tgt Ion: 56 Resp: 229  
Ion Ratio Lower Upper  
56 100  
55 121.8 56.2 84.2#

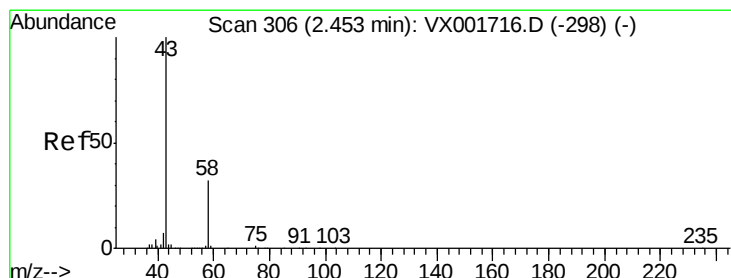
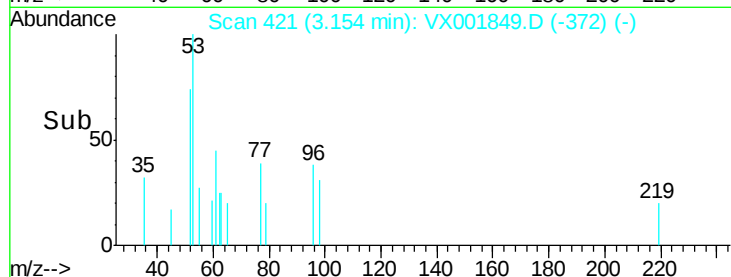
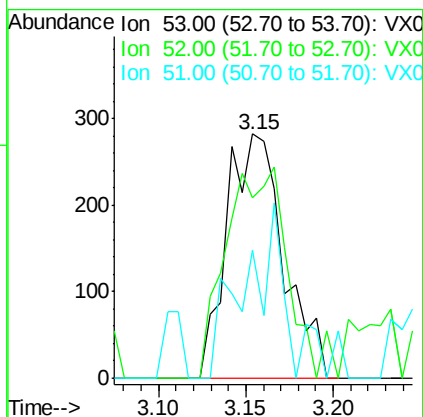
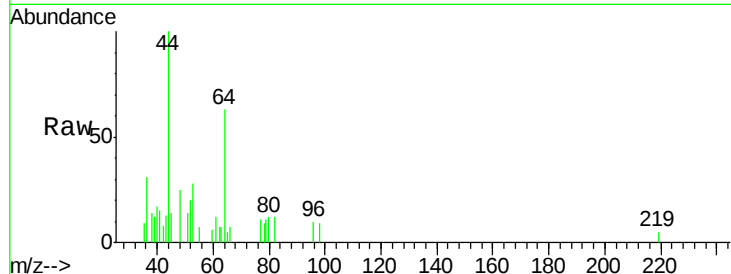




#15  
 Acrylonitrile  
 Concen: 0.37 ug/l  
 RT: 3.15 min Scan# 421  
 Delta R.T. 0.00 min  
 Lab File: VX001849.D  
 Acq: 19 May 2018 02:27

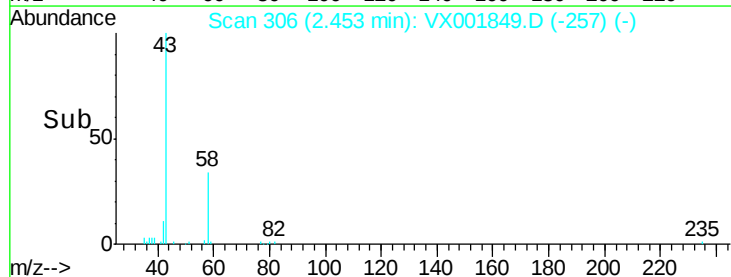
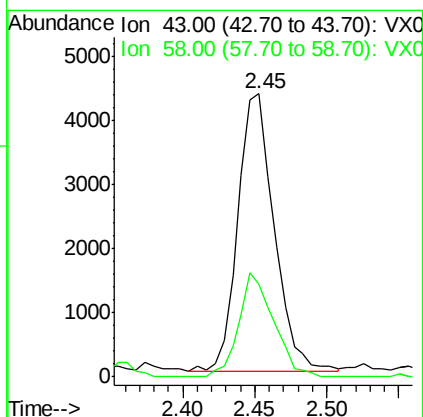
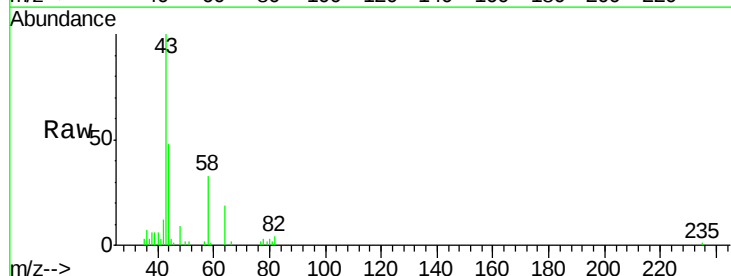
Instrument :  
 MSVOA\_X  
 ClientSampled :  
 PB109413TB 5X

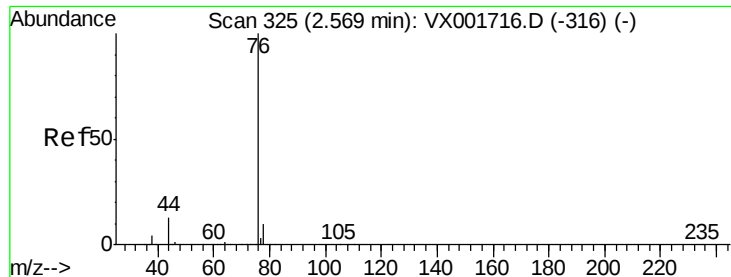
Tgt Ion: 53 Resp: 638  
 Ion Ratio Lower Upper  
 53 100  
 52 90.9 65.6 98.4  
 51 29.6 28.1 42.1



#16  
 Acetone  
 Concen: 5.04 ug/l  
 RT: 2.45 min Scan# 306  
 Delta R.T. 0.00 min  
 Lab File: VX001849.D  
 Acq: 19 May 2018 02:27

Tgt Ion: 43 Resp: 7625  
 Ion Ratio Lower Upper  
 43 100  
 58 33.4 25.3 37.9





#17

Carbon Disulfide

Concen: 0.22 ug/l

RT: 2.57 min Scan# 326

Delta R.T. 0.01 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampleId :

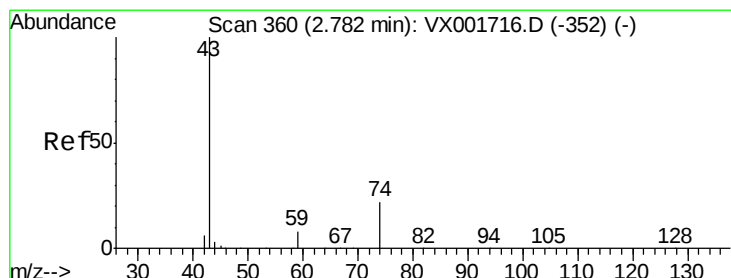
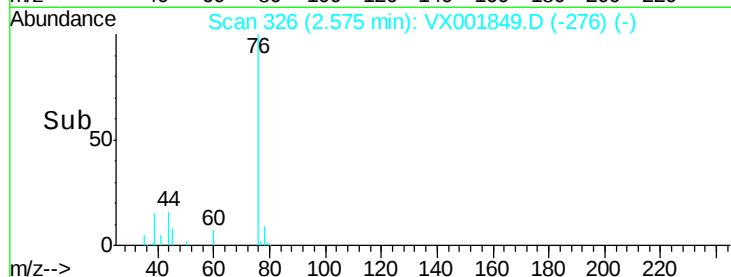
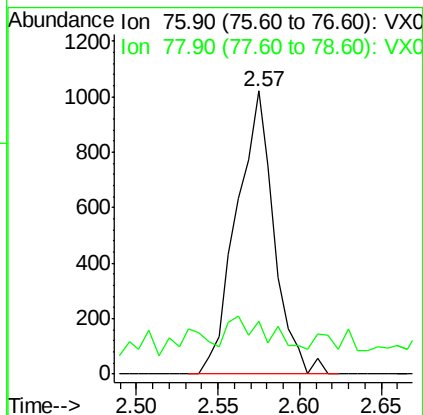
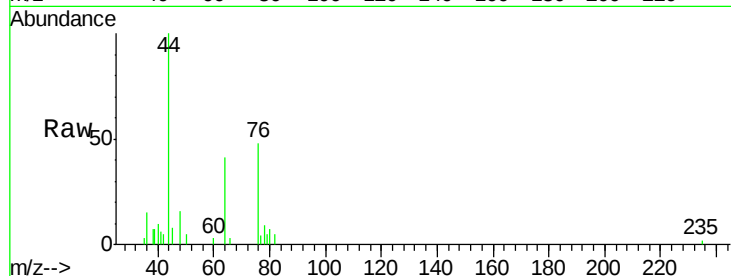
PB109413TB 5X

Tgt Ion: 76 Resp: 1635

Ion Ratio Lower Upper

76 100

78 10.0 7.6 11.4



#18

Methyl Acetate

Concen: 5.39 ug/l

RT: 2.78 min Scan# 360

Delta R.T. 0.00 min

Lab File: VX001849.D

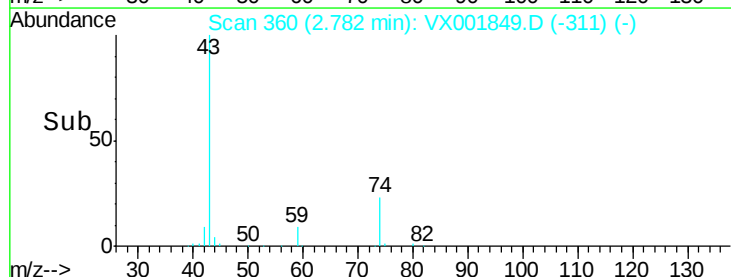
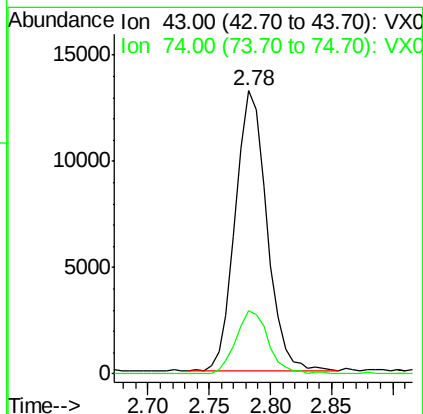
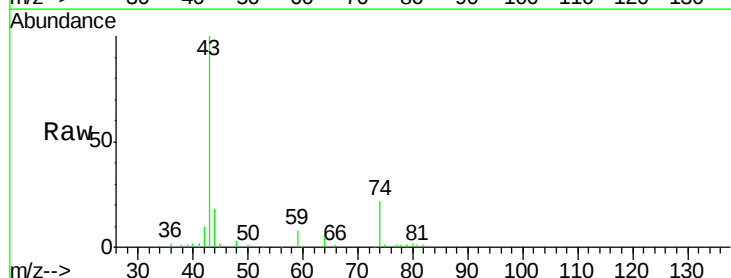
Acq: 19 May 2018 02:27

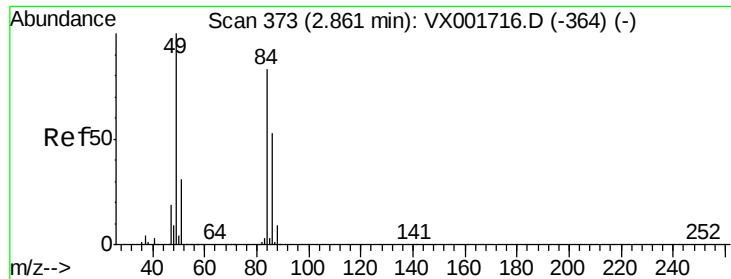
Tgt Ion: 43 Resp: 23806

Ion Ratio Lower Upper

43 100

74 23.1 18.2 27.2

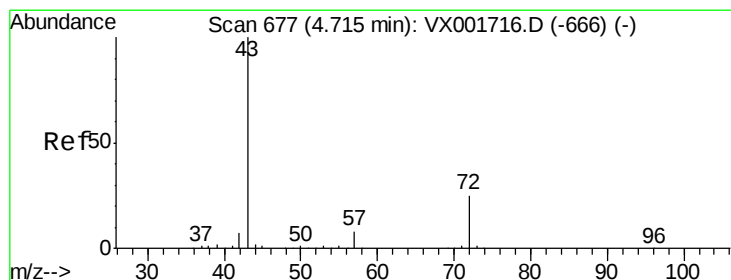
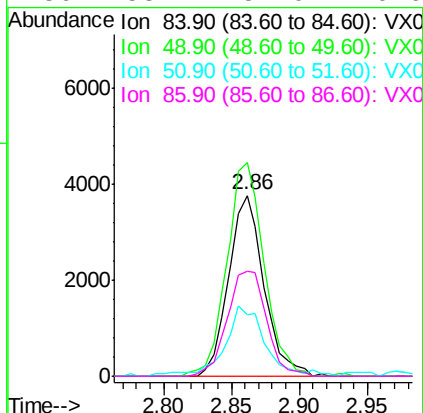
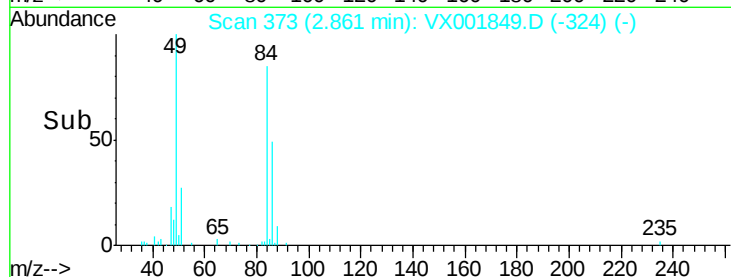
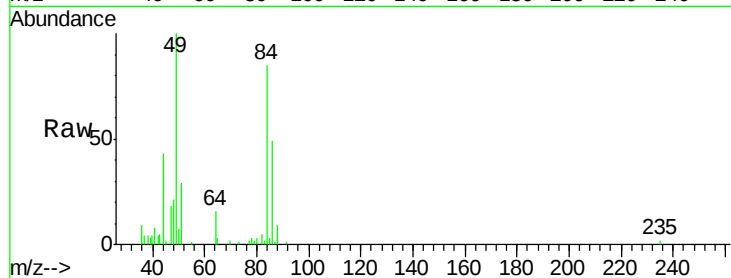




#20  
Methylene Chloride  
Concen: 2.11 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. 0.00 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

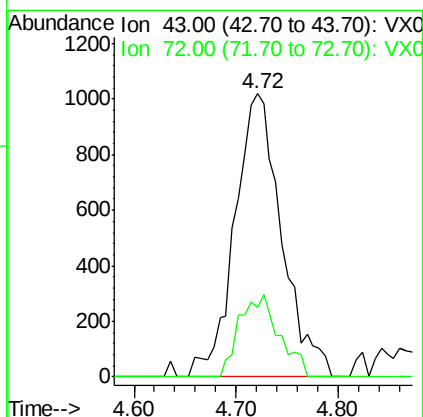
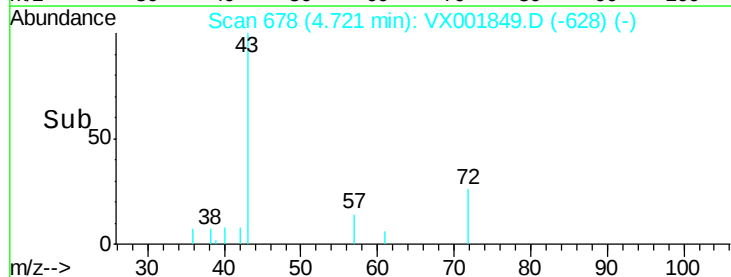
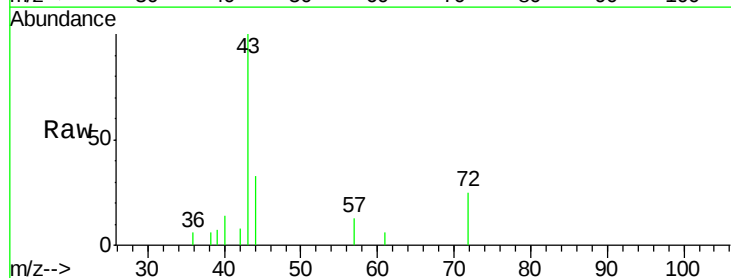
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB109413TB 5X

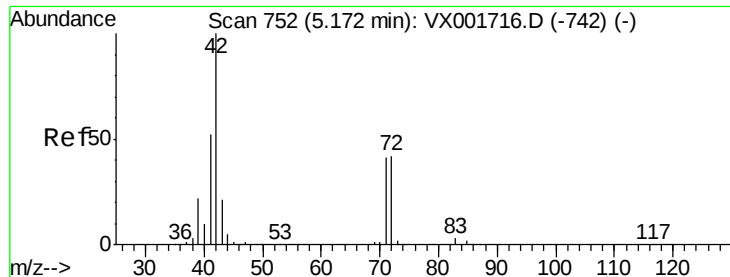
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 6832  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 116.4 | 96.3  | 144.5 |
| 51       | 33.8  | 29.8  | 44.6  |
| 86       | 58.2  | 51.0  | 76.6  |



#25  
2-Butanone  
Concen: 1.41 ug/l  
RT: 4.72 min Scan# 678  
Delta R.T. 0.01 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 3257  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 24.7  | 19.8  | 29.6  |

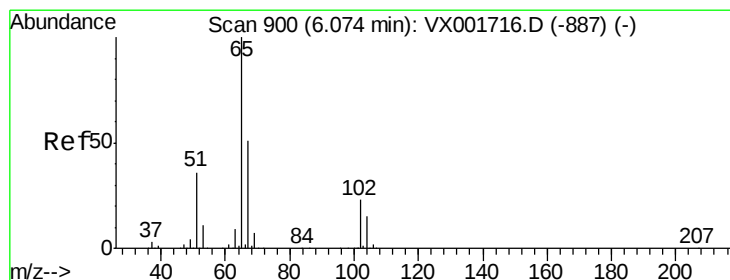
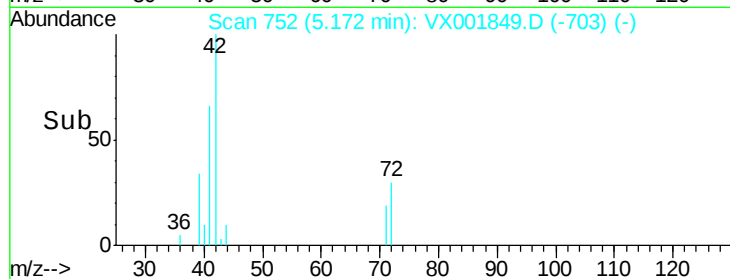
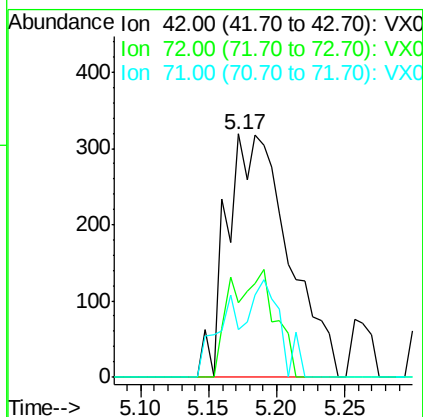
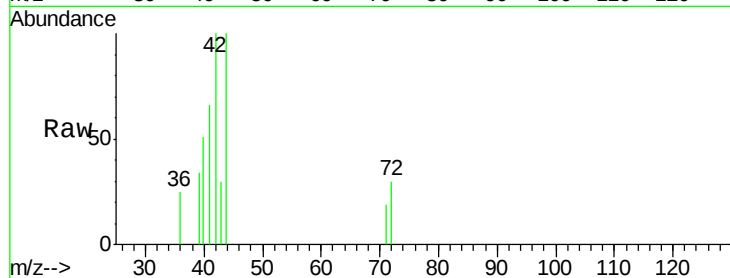




#29  
Tetrahydrofuran  
Concen: 0.67 ug/l  
RT: 5.17 min Scan# 752  
Delta R.T. 0.00 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

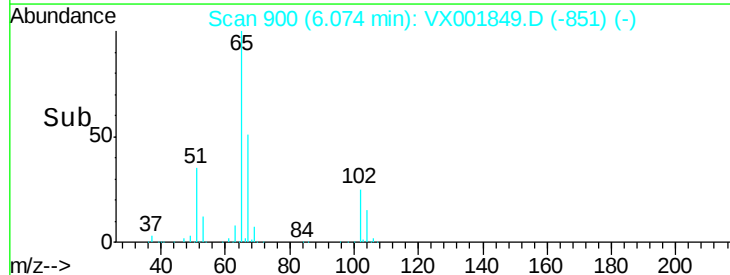
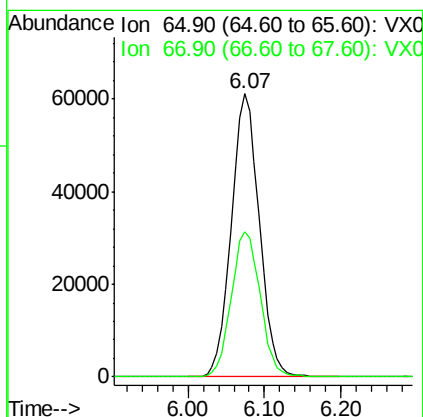
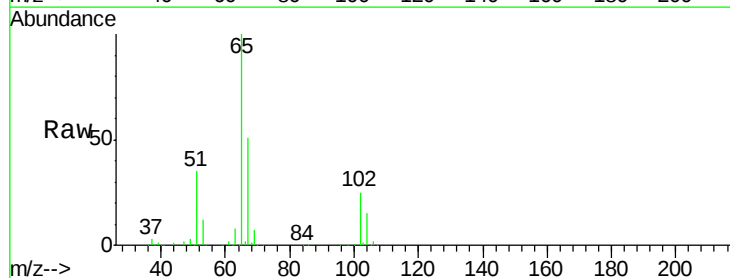
Instrument :  
MSVOA\_X  
ClientSampleId :  
PB109413TB 5X

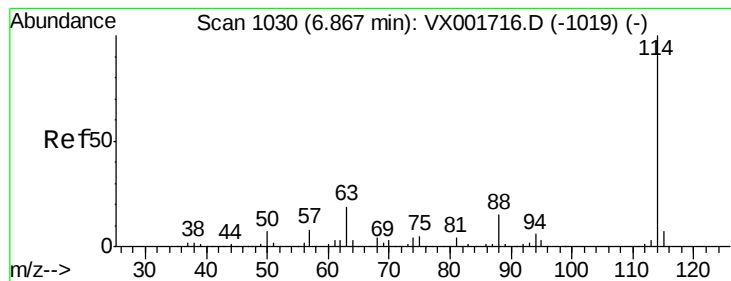
Tgt Ion: 42 Resp: 1015  
Ion Ratio Lower Upper  
42 100  
72 0.0 35.4 53.2#  
71 12.2 33.2 49.8#



#33  
1,2-Dichloroethane-d4  
Concen: 40.29 ug/l  
RT: 6.07 min Scan# 900  
Delta R.T. 0.00 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

Tgt Ion: 65 Resp: 155041  
Ion Ratio Lower Upper  
65 100  
67 53.0 0.0 102.8





#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 6.87 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampleId :

PB109413TB 5X

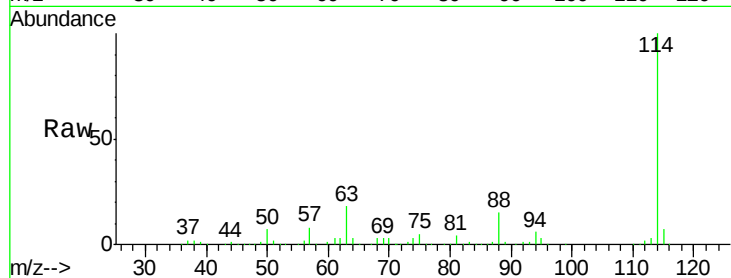
Tgt Ion:114 Resp: 388130

Ion Ratio Lower Upper

114 100

63 18.2 0.0 37.0

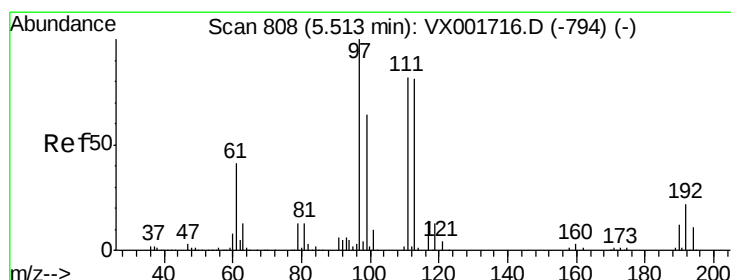
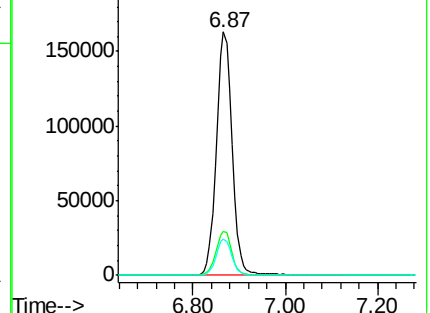
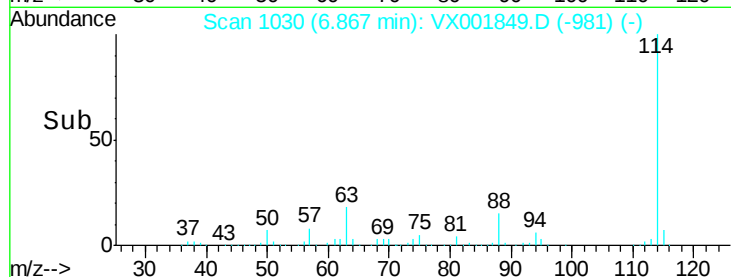
88 15.0 0.0 29.8



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: 41.83 ug/l

RT: 5.51 min Scan# 807

Delta R.T. -0.01 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

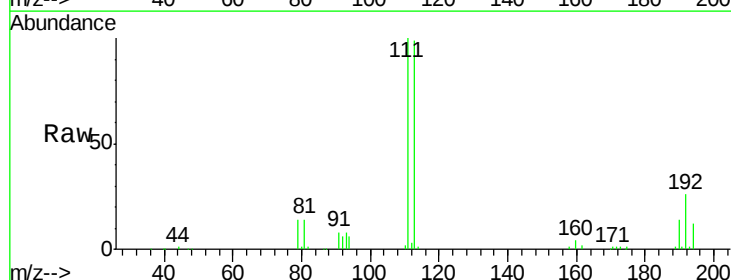
Tgt Ion:113 Resp: 136996

Ion Ratio Lower Upper

113 100

111 101.5 82.0 123.0

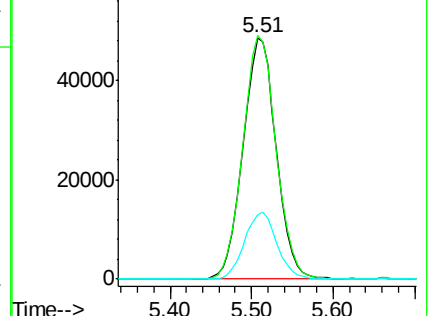
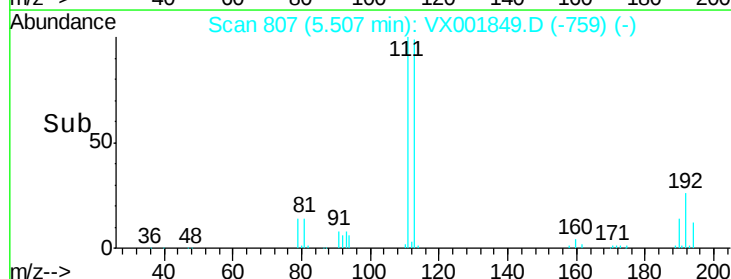
192 27.3 21.6 32.4

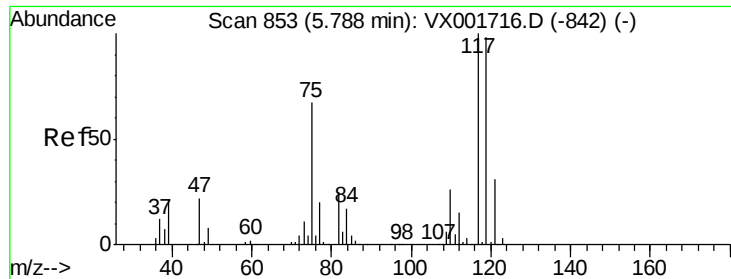


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#38

Carbon Tetrachloride

Concen: 5.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.12 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampleId :

PB109413TB 5X

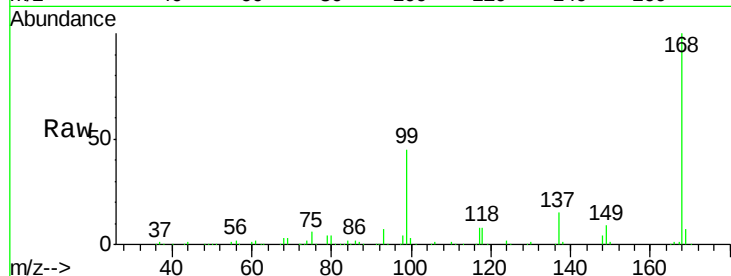
Tgt Ion:117 Resp: 23400

Ion Ratio Lower Upper

117 100

119 4.4 77.6 116.4#

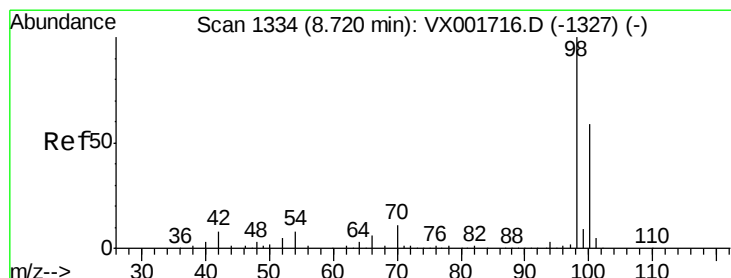
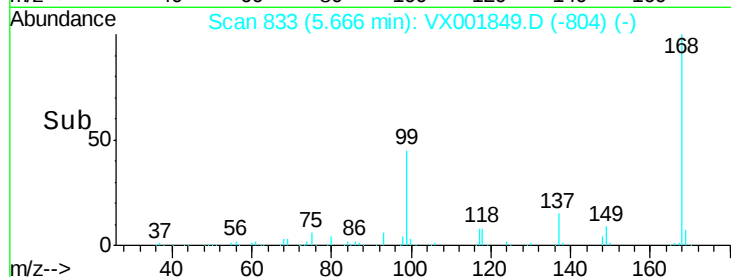
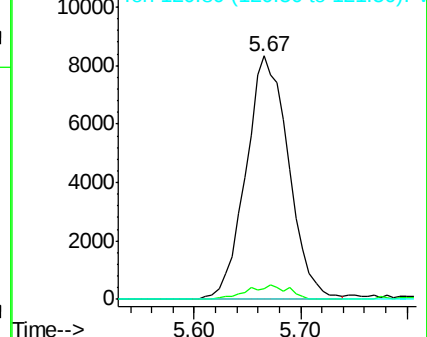
121 0.0 24.6 36.8#



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: 41.97 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX001849.D

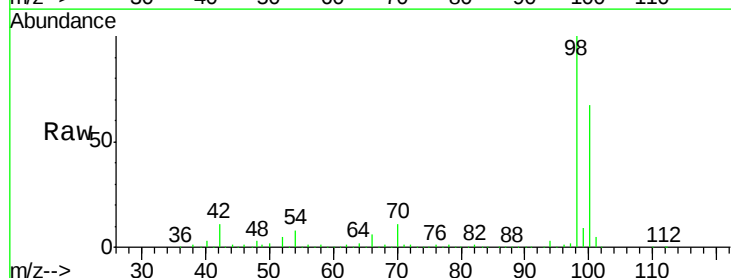
Acq: 19 May 2018 02:27

Tgt Ion: 98 Resp: 492352

Ion Ratio Lower Upper

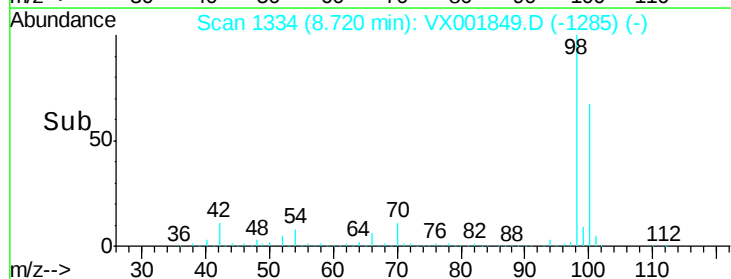
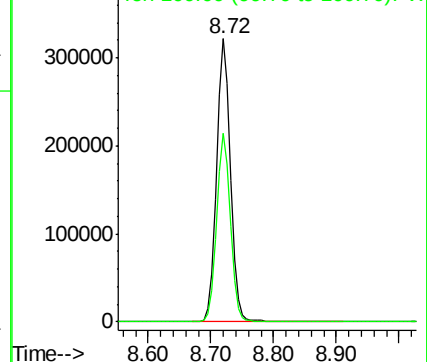
98 100

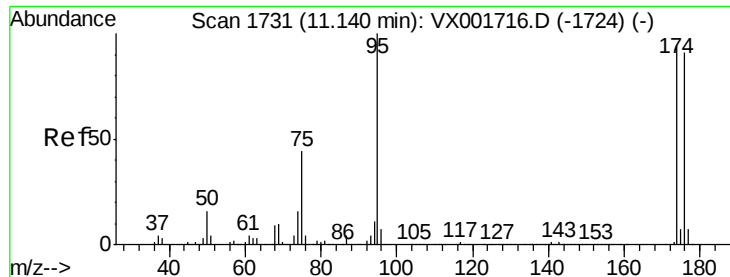
100 66.4 54.0 81.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

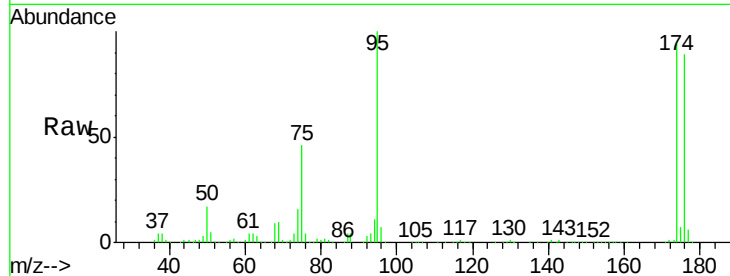




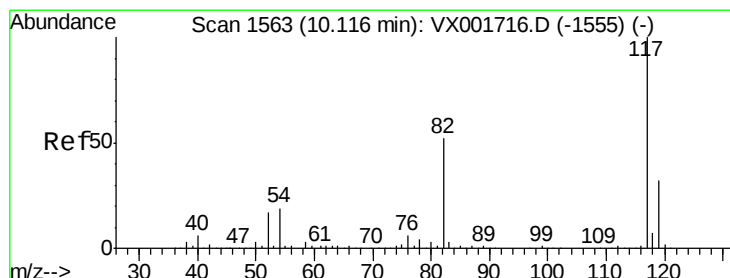
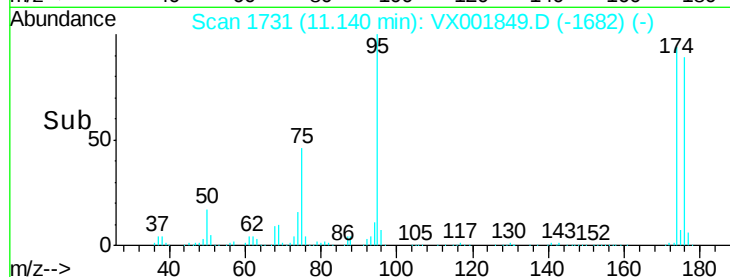
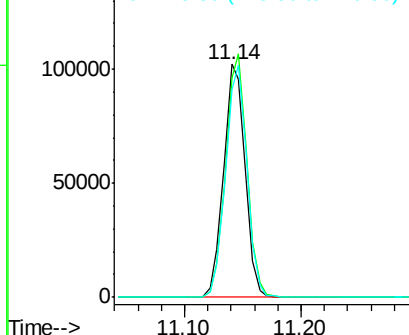
#62  
4-Bromofluorobenzene  
Concen: 30.73 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

Instrument :  
MSVOA\_X  
ClientSampleId :  
PB109413TB 5X

Tgt Ion: 95 Resp: 129811  
Ion Ratio Lower Upper  
95 100  
174 103.9 0.0 201.8  
176 99.1 0.0 196.8

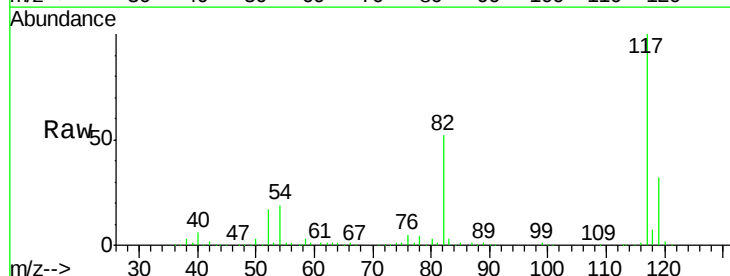


Abundance Ion 94.90 (94.60 to 95.60): VX0  
Ion 173.80 (173.50 to 174.50): V  
Ion 175.80 (175.50 to 176.50): V

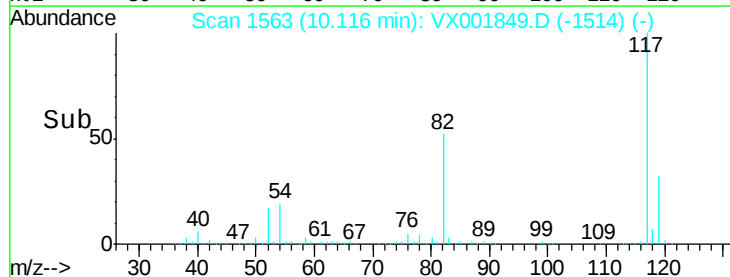
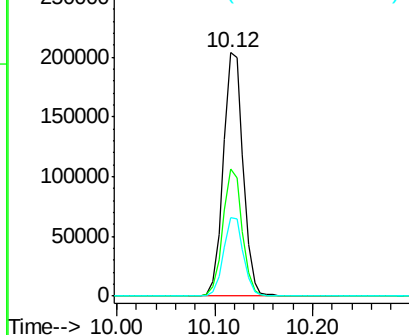


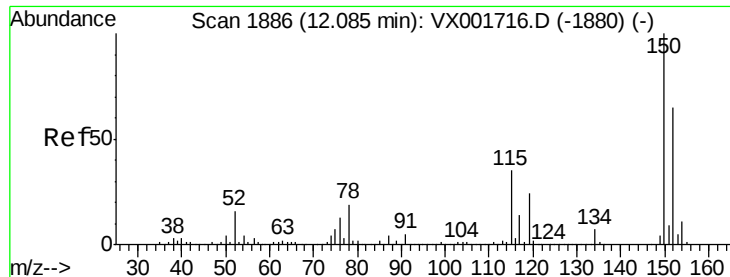
#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. 0.00 min  
Lab File: VX001849.D  
Acq: 19 May 2018 02:27

Tgt Ion: 117 Resp: 285741  
Ion Ratio Lower Upper  
117 100  
82 52.2 41.4 62.2  
119 32.2 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: 12.09 min Scan# 1886

Delta R.T. 0.00 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampleId :

PB109413TB 5X

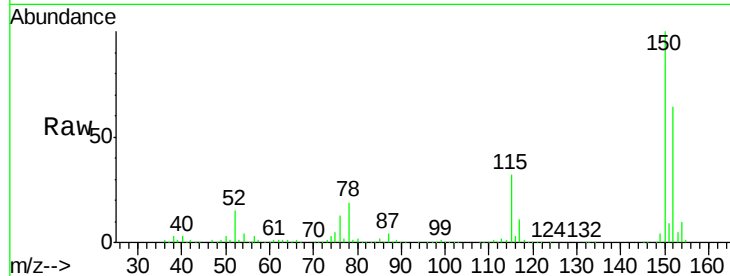
Tgt Ion: 152 Resp: 145567

Ion Ratio Lower Upper

152 100

115 51.2 37.4 112.2

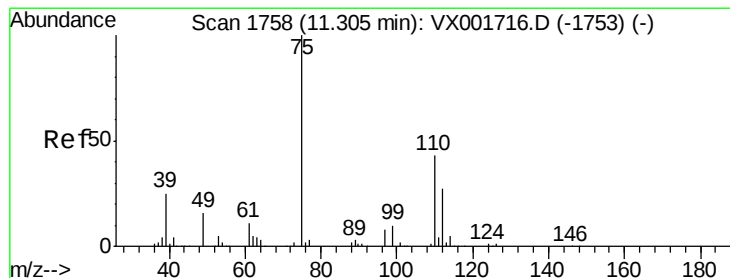
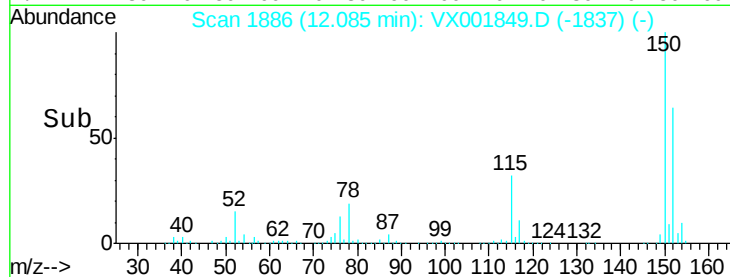
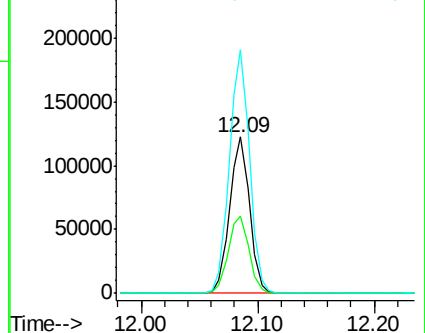
150 156.9 0.0 344.8



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: 21.88 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX001849.D

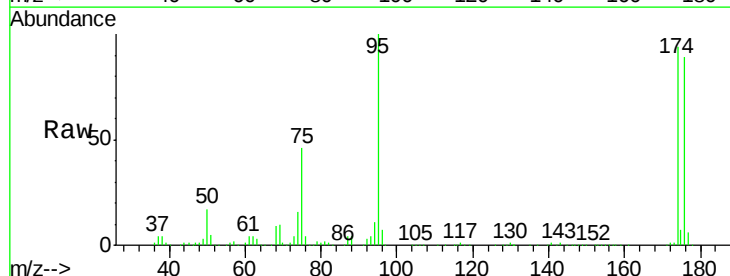
Acq: 19 May 2018 02:27

Tgt Ion: 75 Resp: 60577

Ion Ratio Lower Upper

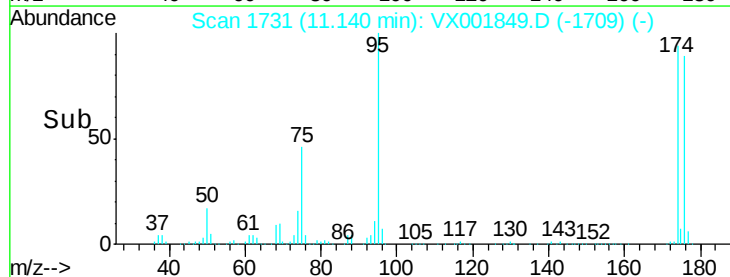
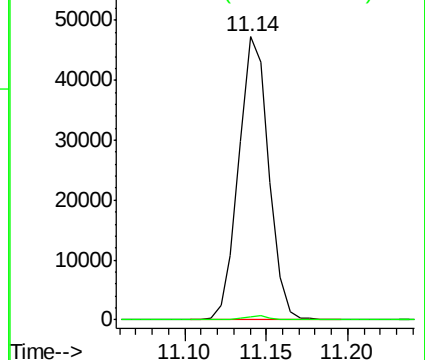
75 100

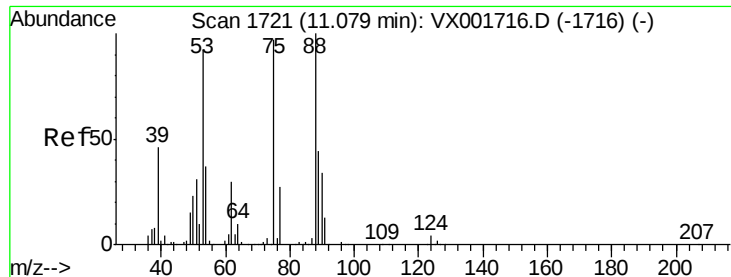
77 1.3 18.9 56.7#



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: 64.21 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

Instrument :

MSVOA\_X

ClientSampleId :

PB109413TB 5X

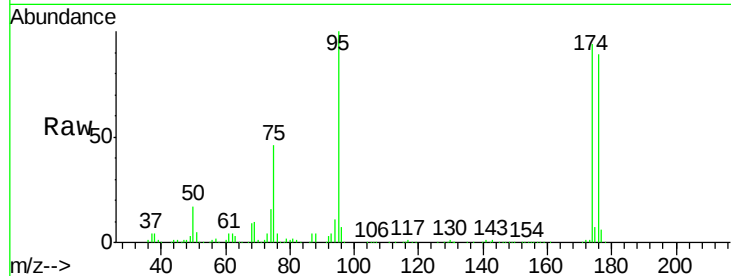
Tgt Ion: 75 Resp: 60577

Ion Ratio Lower Upper

75 100

53 0.1 79.4 119.2#

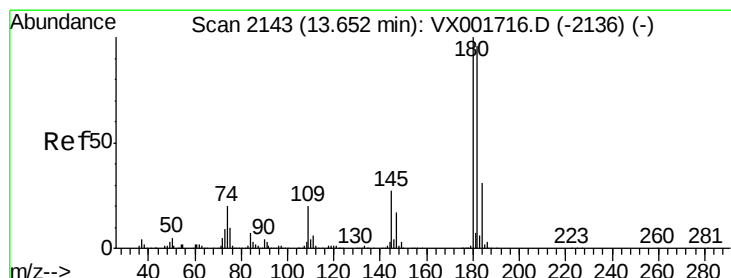
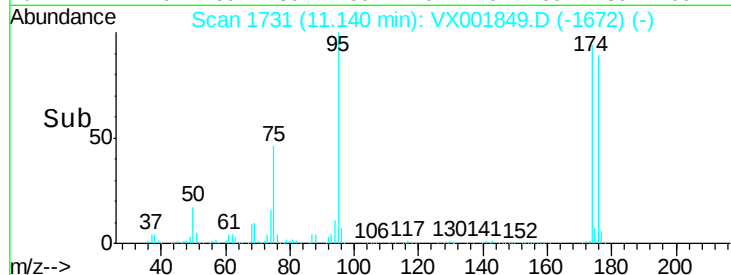
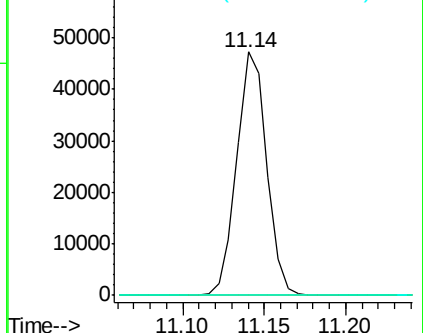
89 0.0 38.8 58.2#



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



#93

1,2,4-Trichlorobenzene

Concen: 0.23 ug/l

RT: 13.65 min Scan# 2143

Delta R.T. 0.00 min

Lab File: VX001849.D

Acq: 19 May 2018 02:27

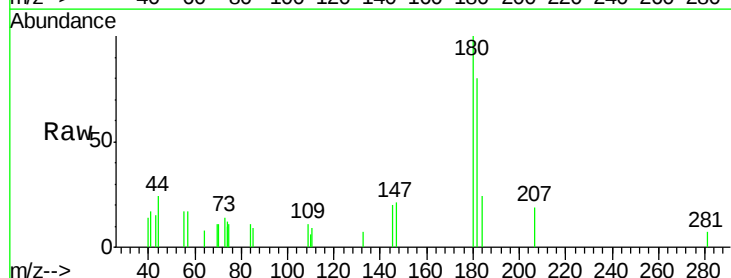
Tgt Ion: 180 Resp: 969

Ion Ratio Lower Upper

180 100

182 97.4 47.6 142.9

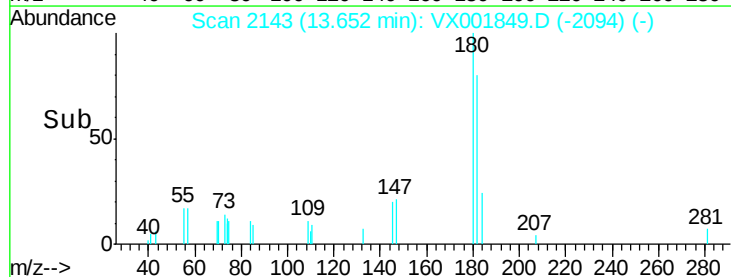
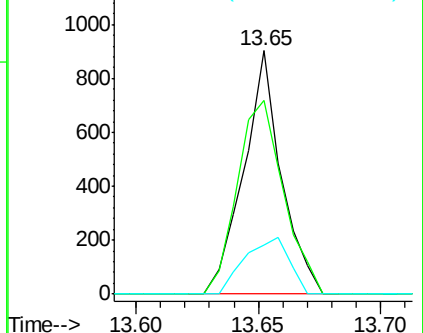
145 27.2 13.4 40.1

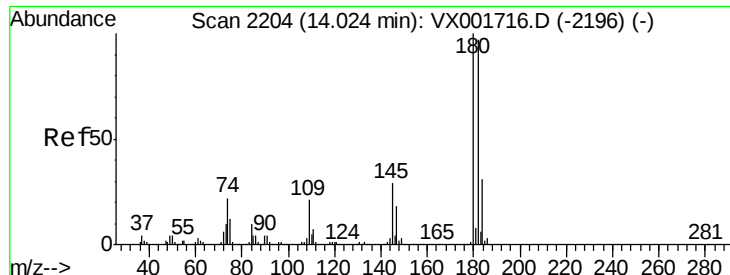


Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V





#96  
 1,2,3-Trichlorobenzene  
 Concen: 0.21 ug/l  
 RT: 14.02 min Scan# 2204  
 Delta R.T. 0.00 min  
 Lab File: VX001849.D  
 Acq: 19 May 2018 02:27

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 PB109413TB 5X

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 109.1 | 47.9  | 143.7 |
| 145     | 26.5  | 14.2  | 42.8  |

