

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062818\  
 Data File : VX002980.D  
 Acq On : 28 Jun 2018 13:01  
 Operator : JC/MD  
 Sample : VX0628WBL01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0628WBL01

Quant Time: Jun 29 06:07:26 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X062518W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jun 25 14:38:05 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 244189   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 346150   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 314419   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 177544   | 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   | 163325   | 48.39 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.78% |          |
| 35) Dibromofluoromethane    | 5.51  | 113  | 132975   | 48.51 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.02% |          |
| 50) Toluene-d8              | 8.72  | 98   | 481775   | 48.13 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.26% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 167484   | 43.38 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 86.76% |          |

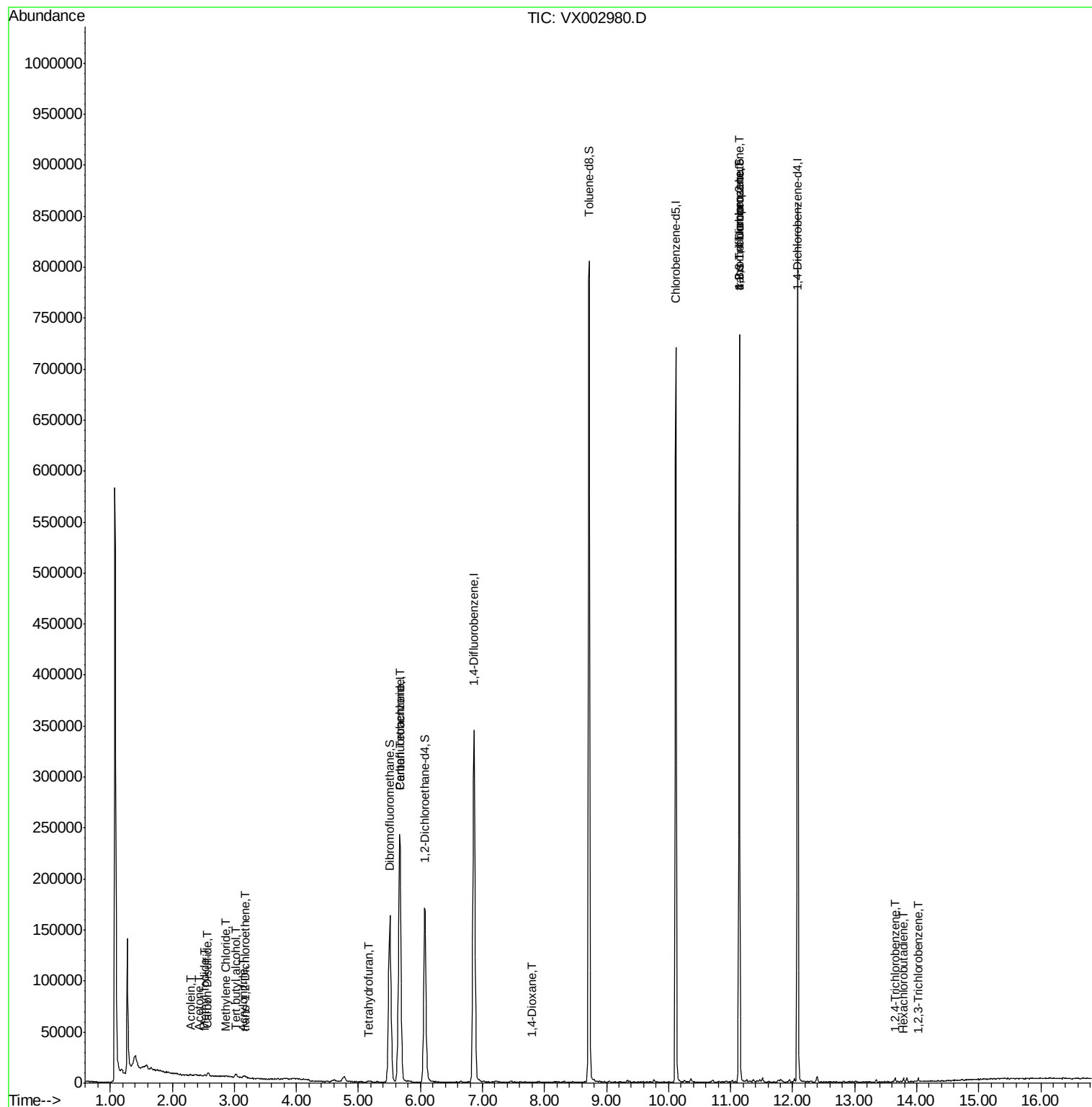
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.20  | 85   | 198      | Below Cal |       | 97     |
| 3) Chloromethane               | 1.32  | 50   | 535      | Below Cal | #     | 71     |
| 5) Bromomethane                | 1.65  | 94   | 831      | Below Cal | #     | 67     |
| 6) Chloroethane                | 1.89  | 64   | 1268     | Below Cal | #     | 47     |
| 10) Methyl Iodide              | 2.52  | 142  | 1544     | 6.72      | ug/l  | 96     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 1848     | 2.75      | ug/l  | # 75   |
| 13) Acrolein                   | 2.29  | 56   | 404      | 5.29      | ug/l  | # 14   |
| 15) Acrylonitrile              | 3.15  | 53   | 740      | 0.52      | ug/l  | # 62   |
| 16) Acetone                    | 2.44  | 43   | 866      | 0.62      | ug/l  | # 81   |
| 17) Carbon Disulfide           | 2.57  | 76   | 4296     | 0.67      | ug/l  | # 88   |
| 20) Methylene Chloride         | 2.86  | 84   | 628      | 0.23      | ug/l  | # 79   |
| 21) trans-1,2-Dichloroethene   | 3.17  | 96   | 599      | 0.23      | ug/l  | # 64   |
| 29) Tetrahydrofuran            | 5.16  | 42   | 444      | 0.33      | ug/l  | # 56   |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 22062    | 5.30      | ug/l  | # 16   |
| 49) 1,4-Dioxane                | 7.79  | 88   | 25       | 0.36      | ug/l  | # 1    |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 89196    | 27.74     | ug/l  | # 33   |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 89196    | 78.42     | ug/l  | # 7    |
| 93) 1,2,4-Trichlorobenzene     | 13.65 | 180  | 1091     | 0.24      | ug/l  | 96     |
| 94) Hexachlorobutadiene        | 13.79 | 225  | 670      | 0.29      | ug/l  | 97     |
| 96) 1,2,3-Trichlorobenzene     | 14.02 | 180  | 972      | 0.21      | ug/l  | 96     |

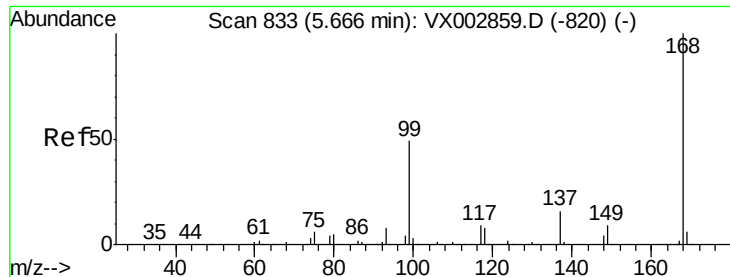
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX062818\  
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ClientSampleId :  
VX0628WBL01

Quant Time: Jun 29 06:07:26 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X062518W.M  
Quant Title : SW846 8260  
QLast Update : Mon Jun 25 14:38:05 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 5.67 min Scan# 833

Delta R.T. -0.00 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampled :

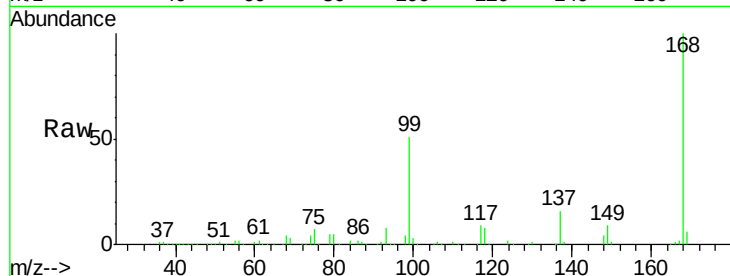
VX0628WBL01

Tot Ion:168 Resp: 244189

Ion Ratio Lower Upper

168 100

99 50.9 39.3 58.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

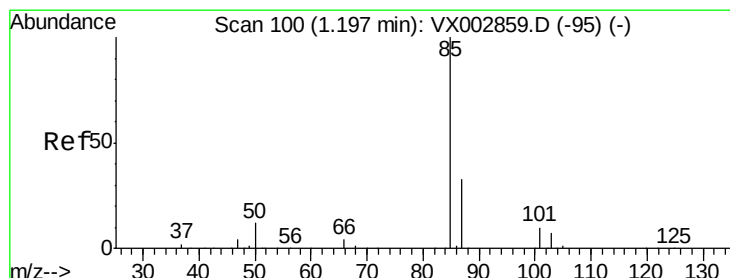
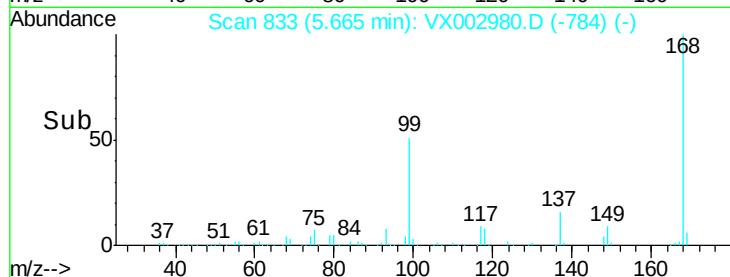
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.20 min Scan# 100

Delta R.T. 0.00 min

Lab File: VX002980.D

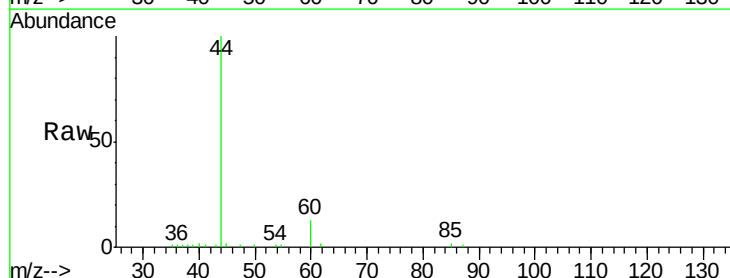
Acq: 28 Jun 2018 13:01

Tgt Ion: 85 Resp: 198

Ion Ratio Lower Upper

85 100

87 30.2 16.0 47.9



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.20

200

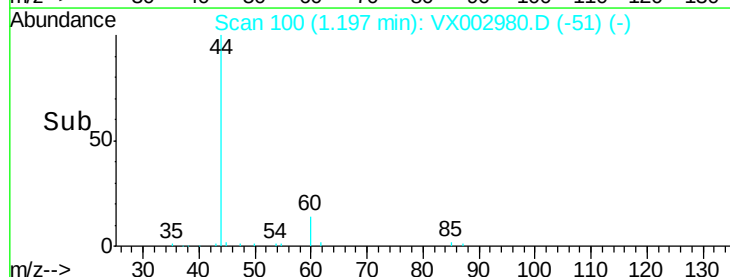
150

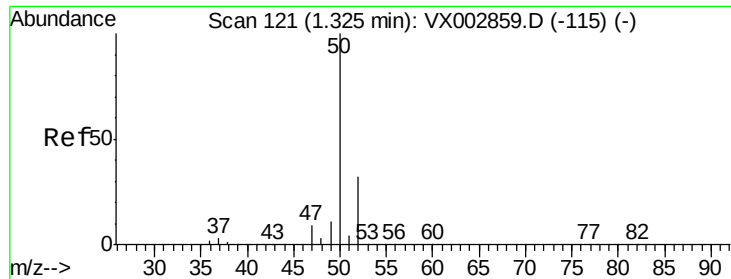
100

50

0

Time--> 1.16 1.18 1.20 1.22





#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 121

Delta R.T. 0.00 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampled :

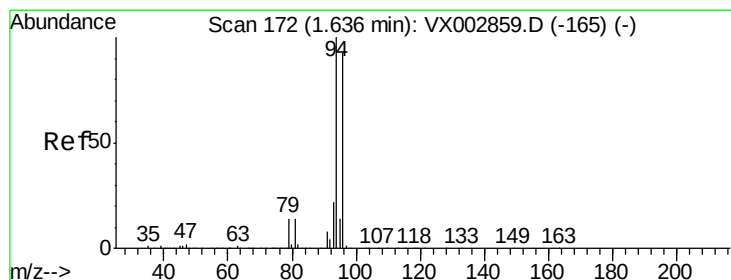
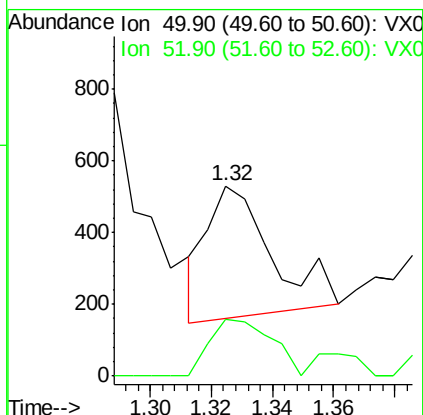
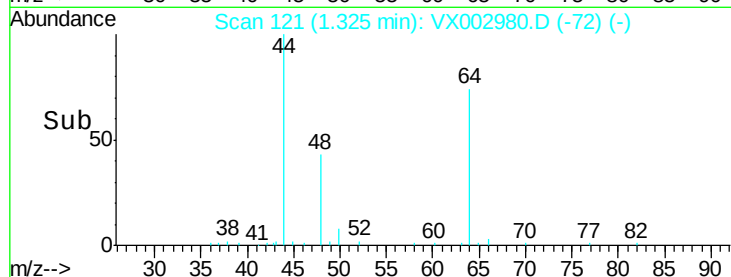
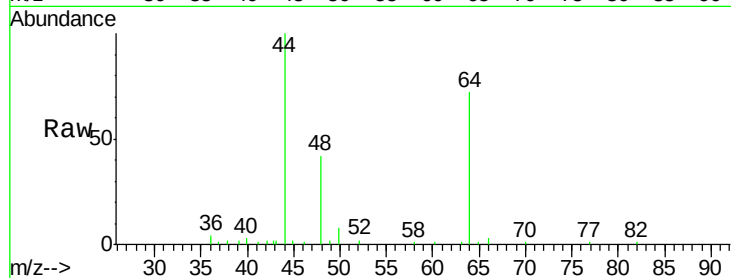
VX0628WBL01

Tot Ion: 50 Resp: 535

Ion Ratio Lower Upper

50 100

52 48.0 25.7 38.5#



#5

Bromomethane

Concen: Below Cal

RT: 1.65 min Scan# 175

Delta R.T. 0.02 min

Lab File: VX002980.D

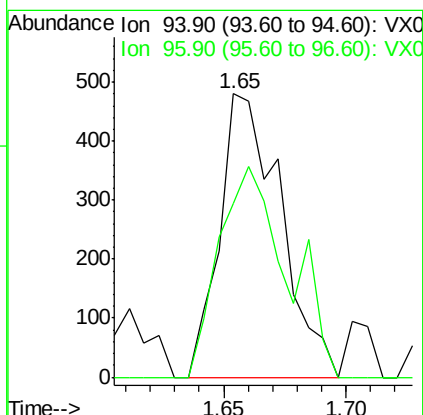
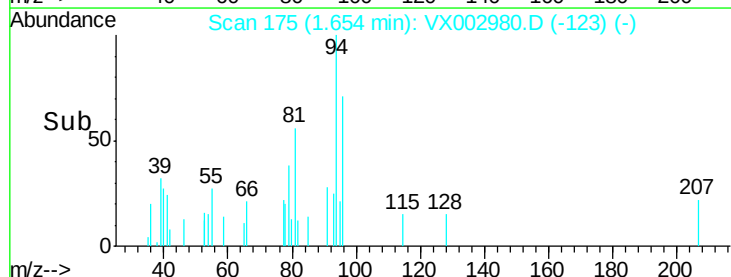
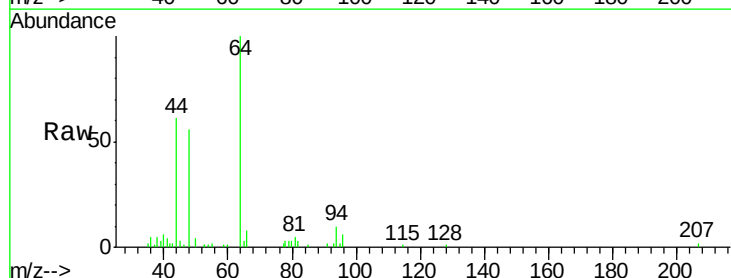
Acq: 28 Jun 2018 13:01

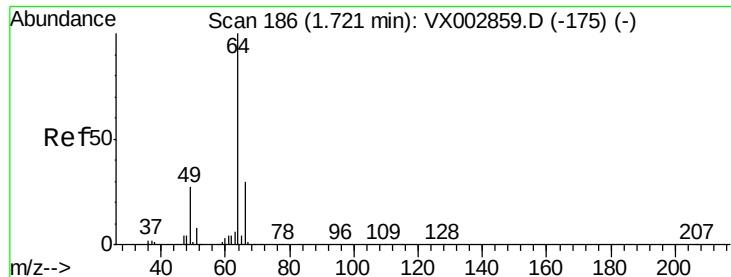
Tgt Ion: 94 Resp: 831

Ion Ratio Lower Upper

94 100

96 61.5 74.9 112.3#





#6

Chloroethane

Concen: Below Cal

RT: 1.89 min Scan# 213

Delta R.T. 0.16 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampled :

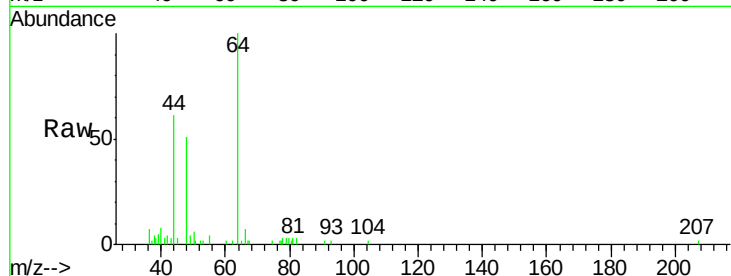
VX0628WBL01

Tot Ion: 64 Resp: 1268

Ion Ratio Lower Upper

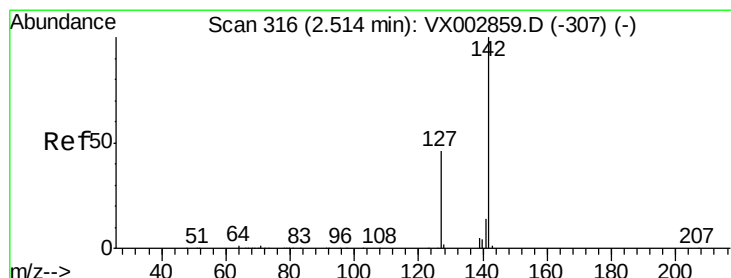
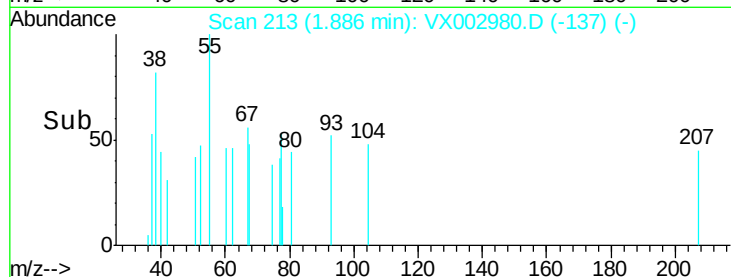
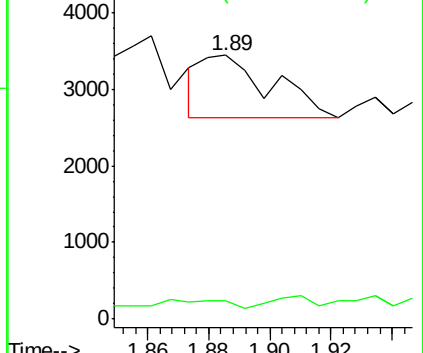
64 100

66 2.1 25.5 38.3#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#10

Methyl Iodide

Concen: 6.72 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

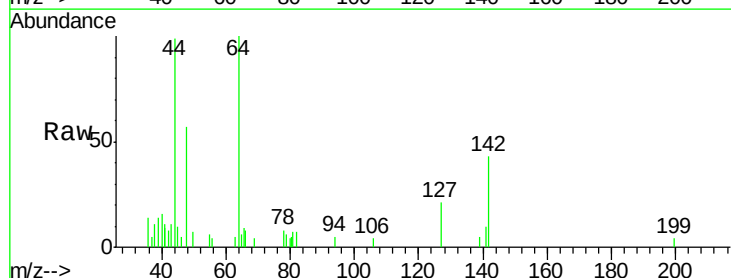
Tgt Ion: 142 Resp: 1544

Ion Ratio Lower Upper

142 100

127 43.0 36.6 55.0

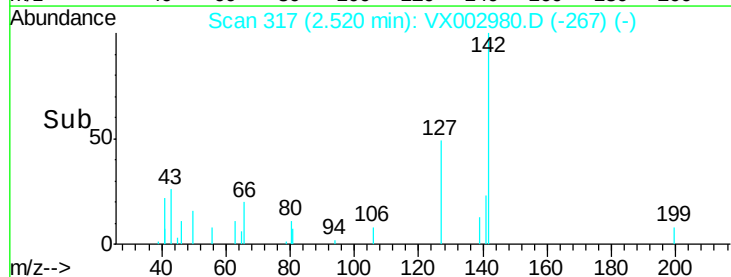
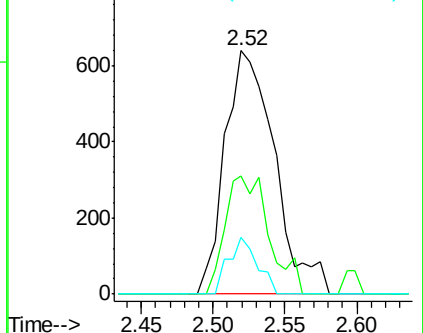
141 13.5 11.3 16.9

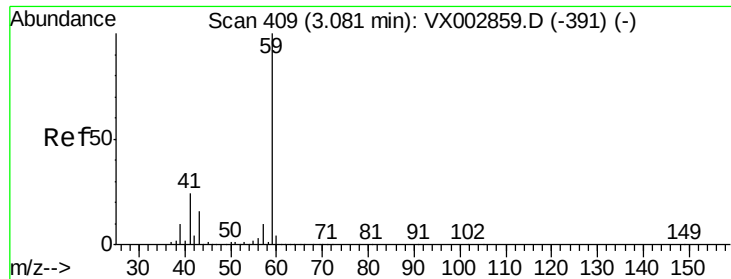


Abundance Ion 141.80 (141.50 to 142.50): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.80 (140.50 to 141.50): V

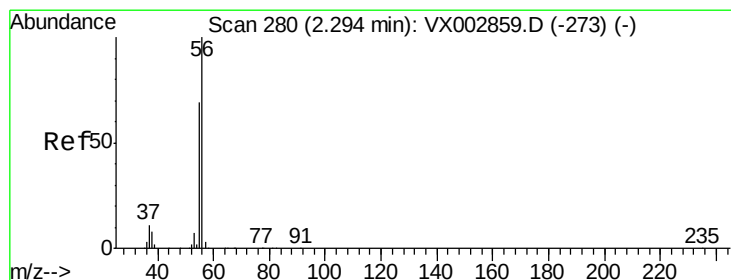
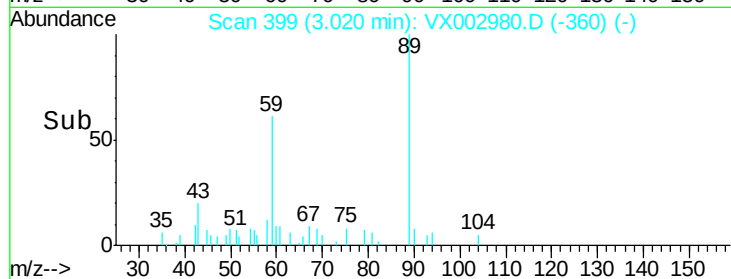
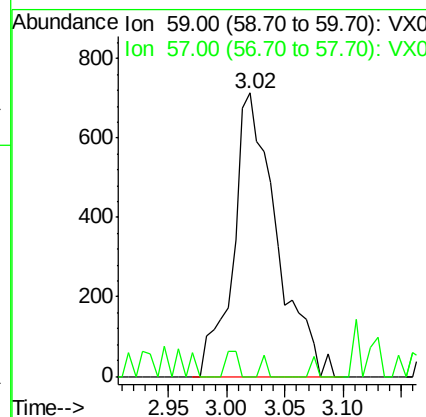
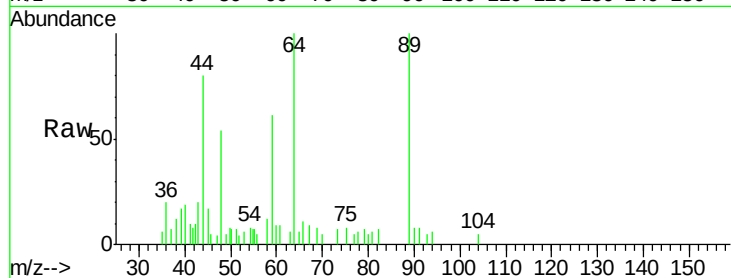




#11  
Tert butyl alcohol  
Concen: 2.75 ug/l  
RT: 3.02 min Scan# 399  
Delta R.T. -0.06 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

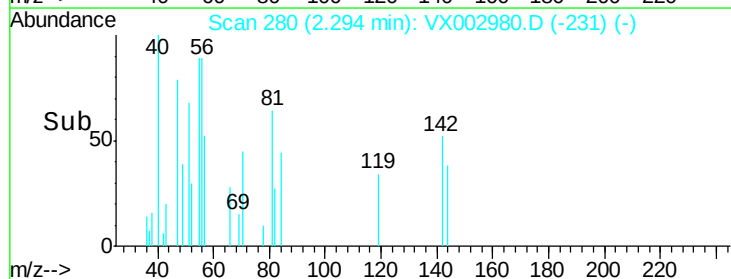
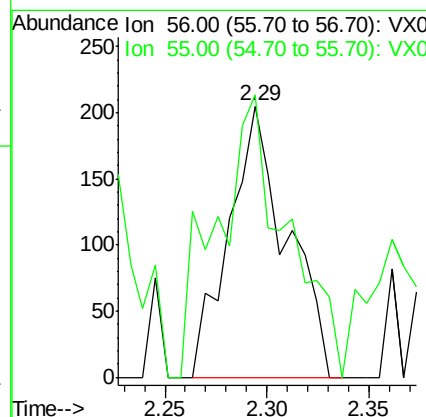
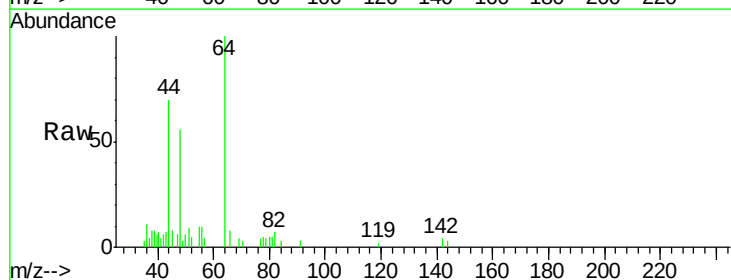
Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0628WBL01

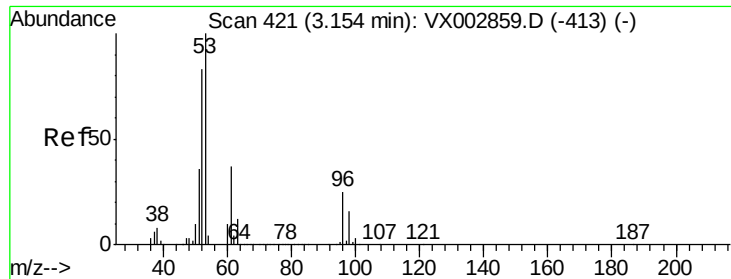
Tot Ion: 59 Resp: 1848  
Ion Ratio Lower Upper  
59 100  
57 1.0 8.2 12.2#



#13  
Acrolein  
Concen: 5.29 ug/l  
RT: 2.29 min Scan# 280  
Delta R.T. 0.00 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

Tgt Ion: 56 Resp: 404  
Ion Ratio Lower Upper  
56 100  
55 0.0 57.0 85.4#





#15

Acrylonitrile

Concen: 0.52 ug/l

RT: 3.15 min Scan# 420

Delta R.T. -0.01 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampled :

VX0628WBL01

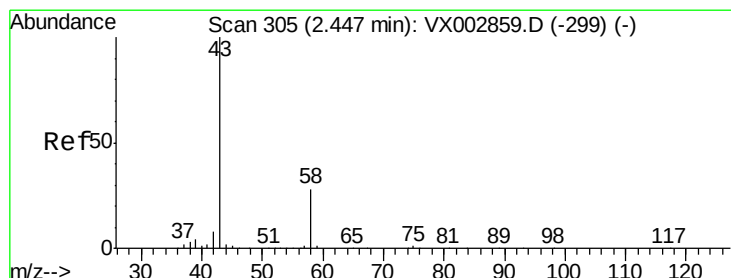
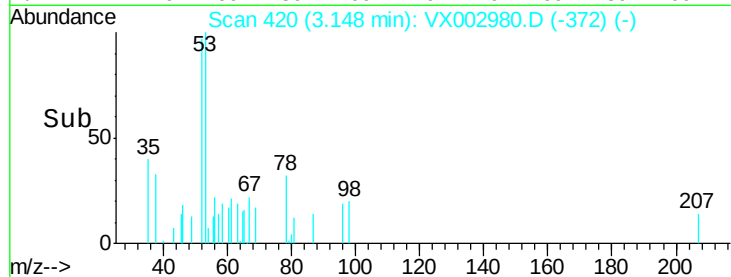
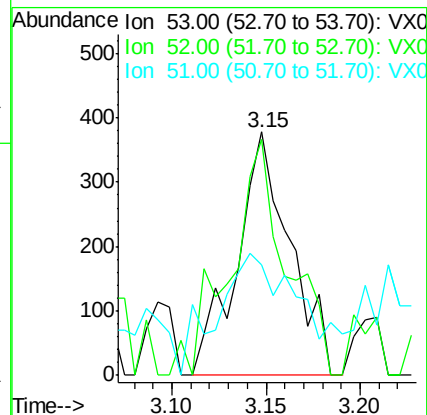
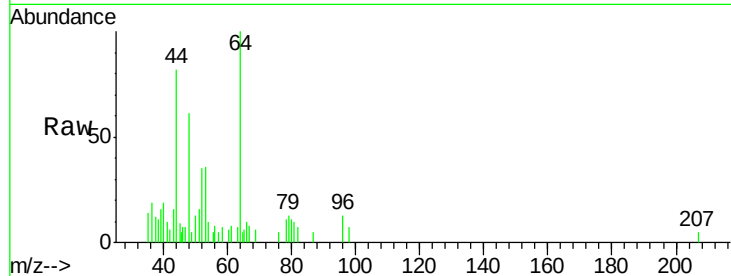
Tot Ion: 53 Resp: 740

Ion Ratio Lower Upper

53 100

52 104.2 66.7 100.1#

51 79.7 29.9 44.9#



#16

Acetone

Concen: 0.62 ug/l

RT: 2.44 min Scan# 304

Delta R.T. -0.01 min

Lab File: VX002980.D

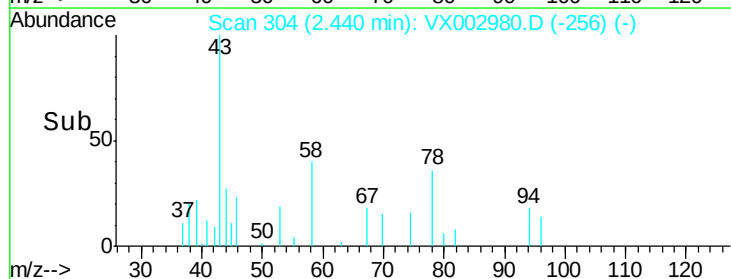
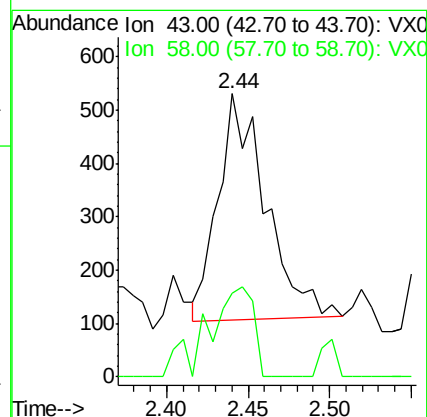
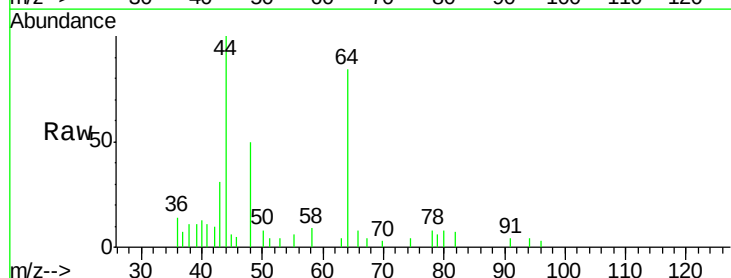
Acq: 28 Jun 2018 13:01

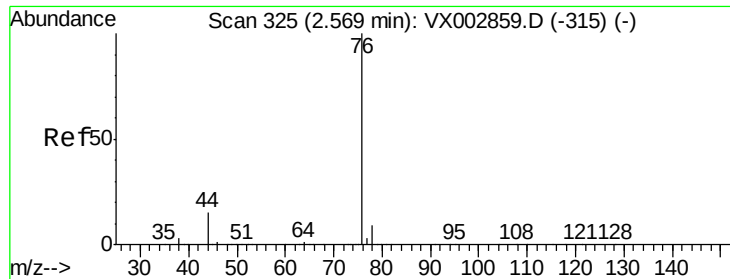
Tgt Ion: 43 Resp: 866

Ion Ratio Lower Upper

43 100

58 37.6 22.1 33.1#

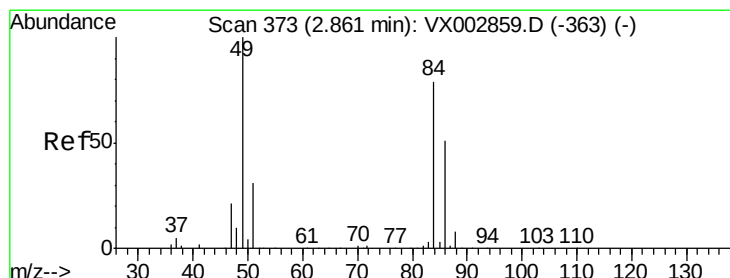
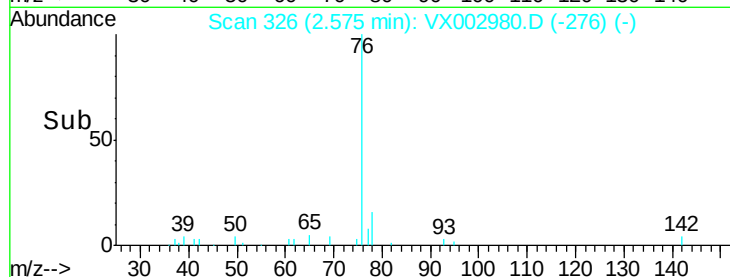
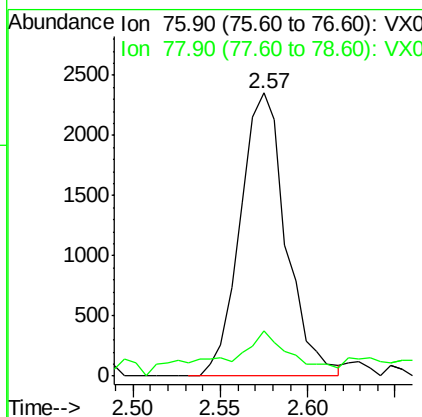
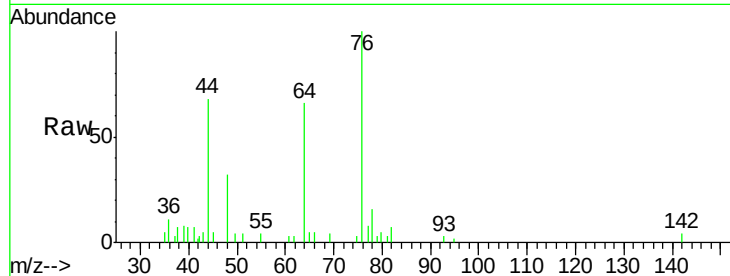




#17  
Carbon Disulfide  
Concen: 0.67 ug/l  
RT: 2.57 min Scan# 326  
Delta R.T. 0.01 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

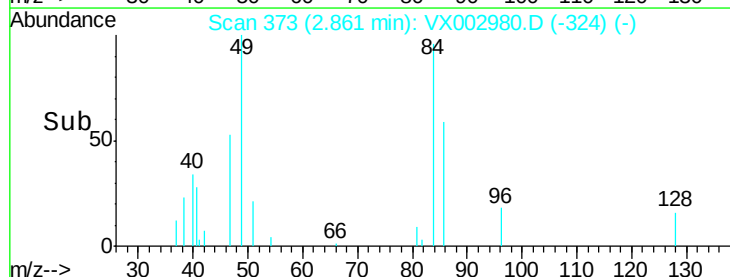
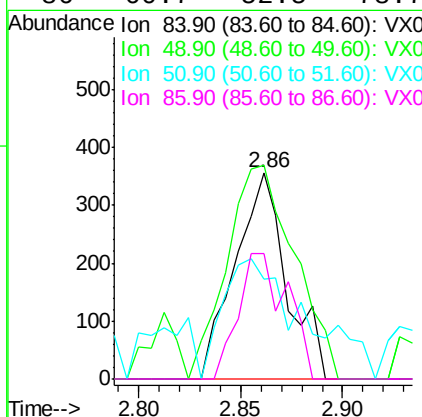
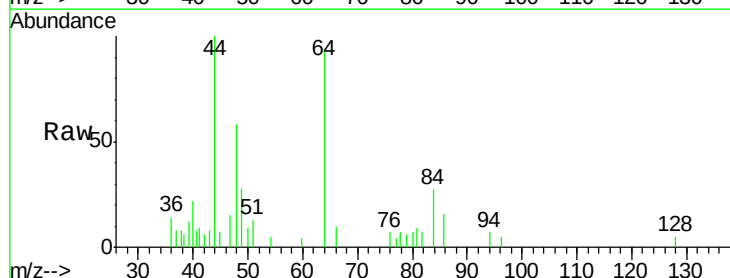
Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0628WBL01

Tot Ion: 76 Resp: 4296  
Ion Ratio Lower Upper  
76 100  
78 12.9 6.9 10.3#

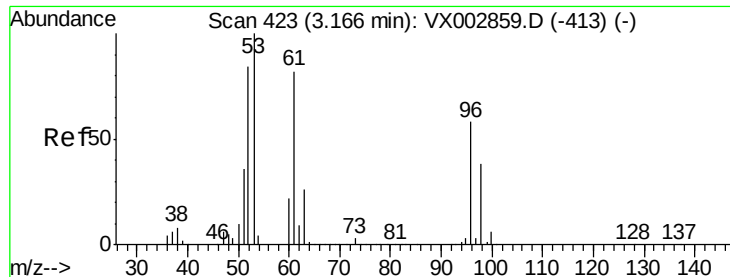


#20  
Methylene Chloride  
Concen: 0.23 ug/l  
RT: 2.86 min Scan# 373  
Delta R.T. -0.00 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

Tgt Ion: 84 Resp: 628  
Ion Ratio Lower Upper  
84 100  
49 103.7 107.8 161.6#  
51 22.8 32.8 49.2#  
86 60.7 52.5 78.7







#21

trans-1,2-Dichloroethene

Concen: 0.23 ug/l

RT: 3.17 min Scan# 423

Delta R.T. -0.00 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampleId :

VX0628WBL01

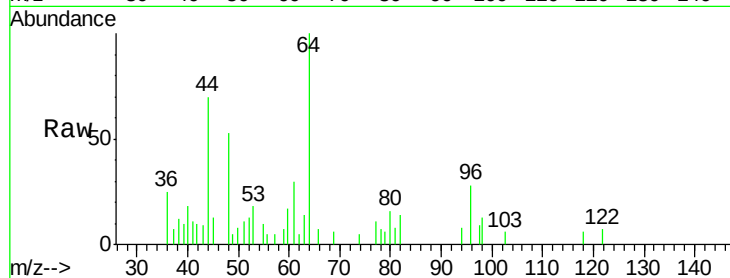
Tot Ion: 96 Resp: 599

Ion Ratio Lower Upper

96 100

61 90.6 117.0 175.4#

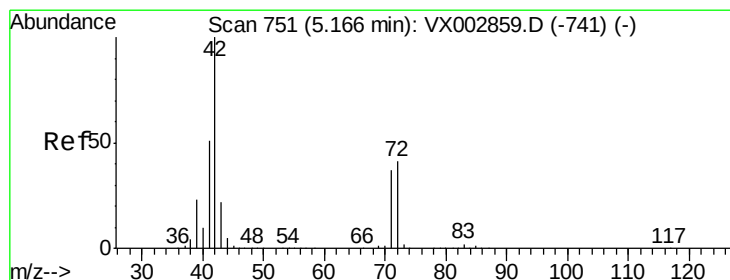
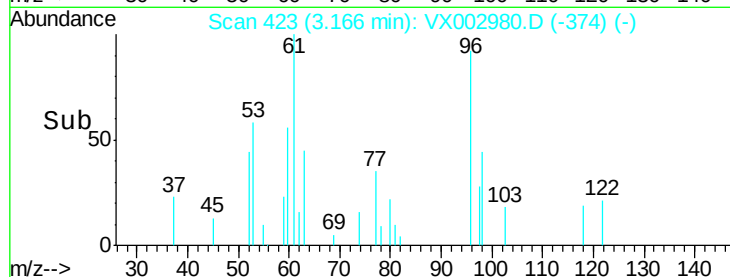
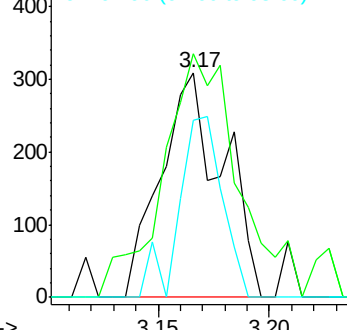
98 79.0 52.4 78.6#



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



#29

Tetrahydrofuran

Concen: 0.33 ug/l

RT: 5.16 min Scan# 750

Delta R.T. -0.01 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

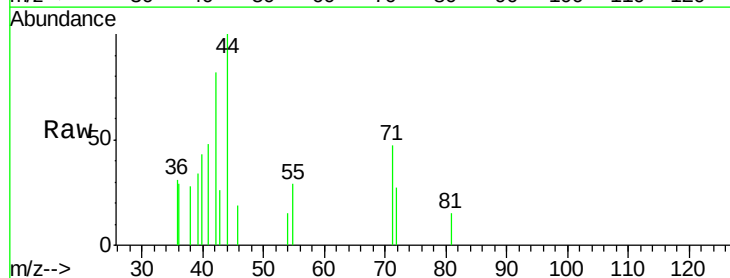
Tgt Ion: 42 Resp: 444

Ion Ratio Lower Upper

42 100

72 56.1 32.0 48.0#

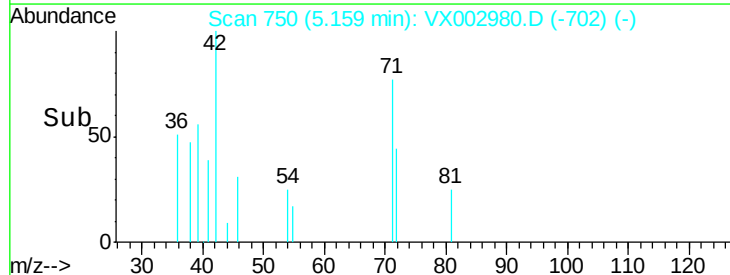
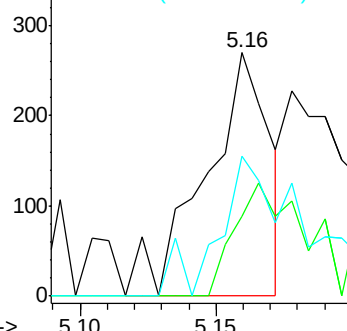
71 75.5 30.1 45.1#

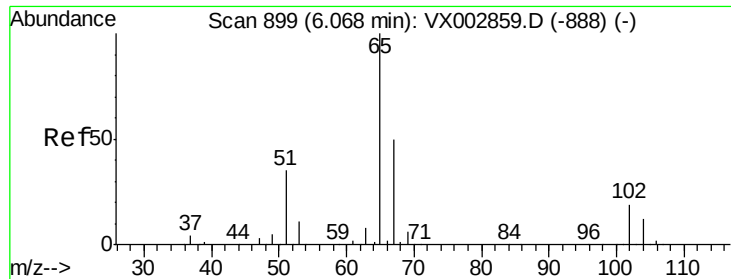


Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

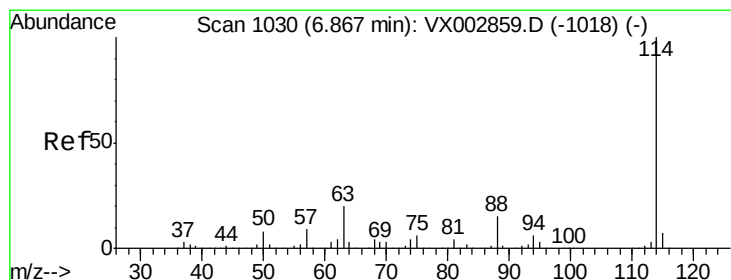
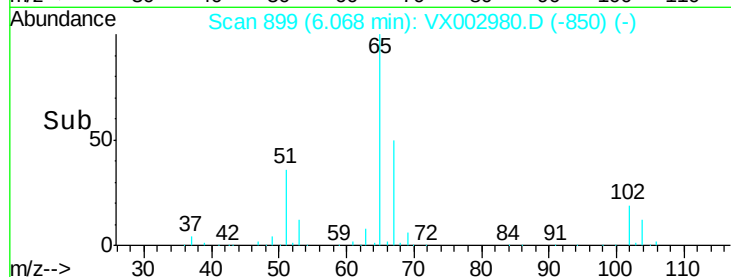
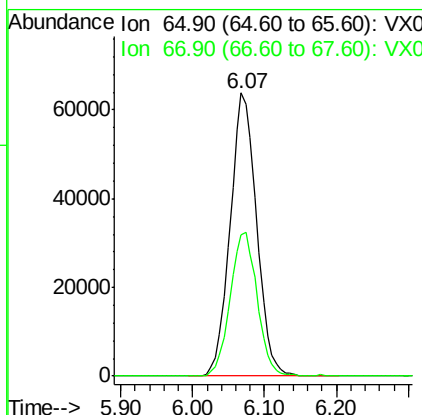
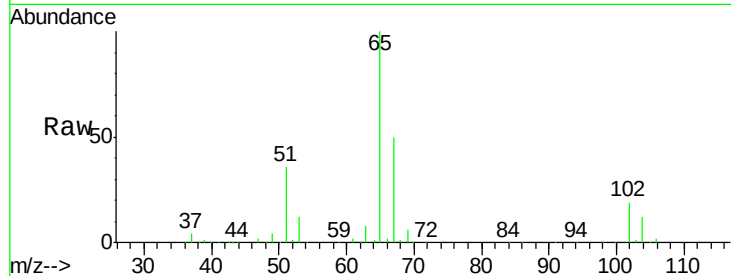




#33  
 1,2-Dichloroethane-d4  
 Concen: 48.39 ug/l  
 RT: 6.07 min Scan# 899  
 Delta R.T. 0.00 min  
 Lab File: VX002980.D  
 Acq: 28 Jun 2018 13:01

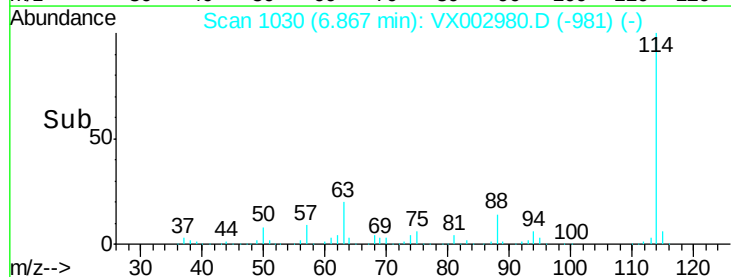
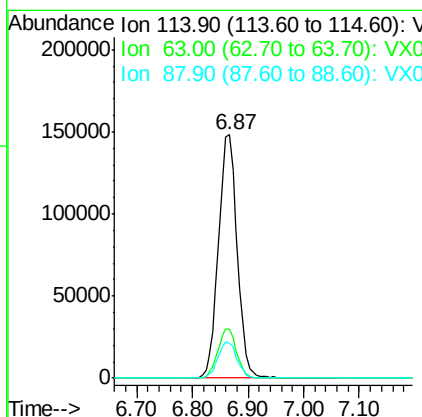
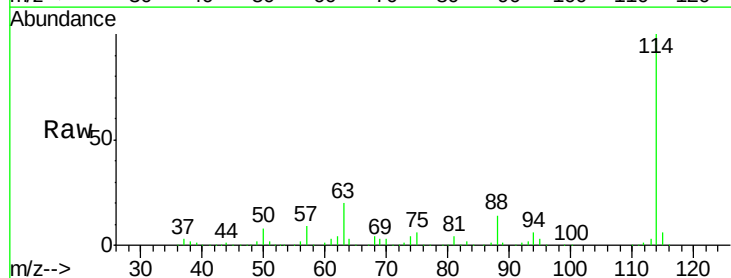
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0628WBL01

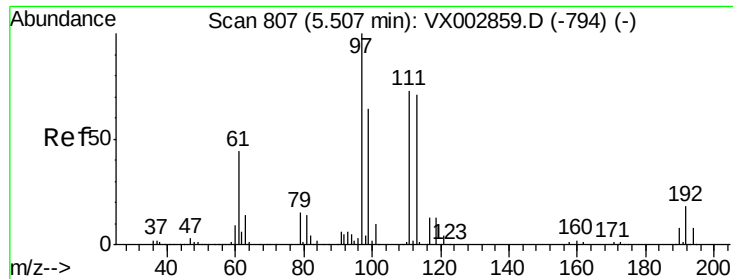
Tot Ion: 65 Resp: 163325  
 Ion Ratio Lower Upper  
 65 100  
 67 51.7 0.0 102.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 6.87 min Scan# 1030  
 Delta R.T. -0.00 min  
 Lab File: VX002980.D  
 Acq: 28 Jun 2018 13:01

Tgt Ion: 114 Resp: 346150  
 Ion Ratio Lower Upper  
 114 100  
 63 20.3 0.0 41.4  
 88 14.3 0.0 30.0





#35

Dibromofluoromethane

Concen: 48.51 ug/l

RT: 5.51 min Scan# 807

Delta R.T. -0.00 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampleId :

VX0628WBL01

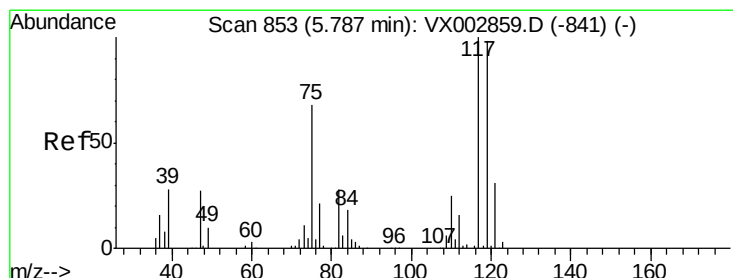
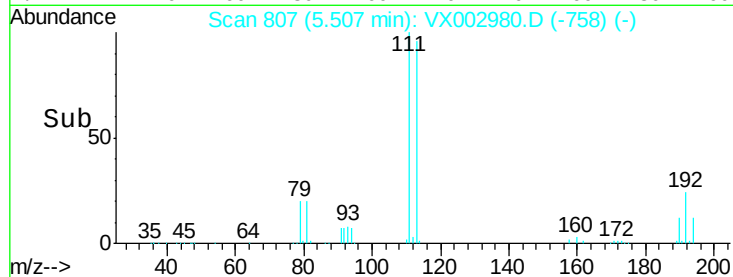
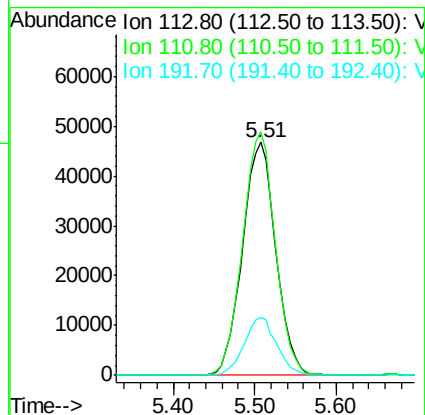
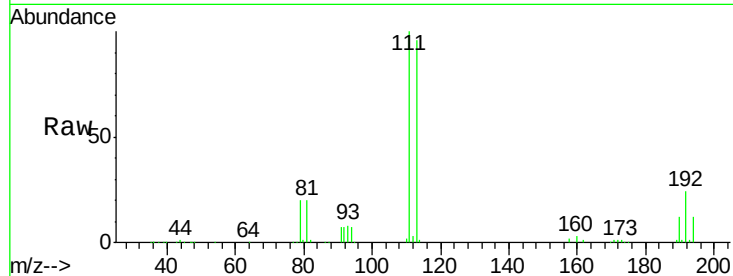
Tot Ion:113 Resp: 132975

Ion Ratio Lower Upper

113 100

111 102.4 81.4 122.0

192 24.2 19.1 28.7



#38

Carbon Tetrachloride

Concen: 5.30 ug/l

RT: 5.66 min Scan# 832

Delta R.T. -0.13 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

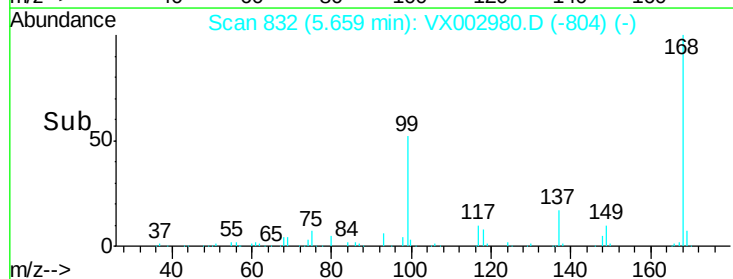
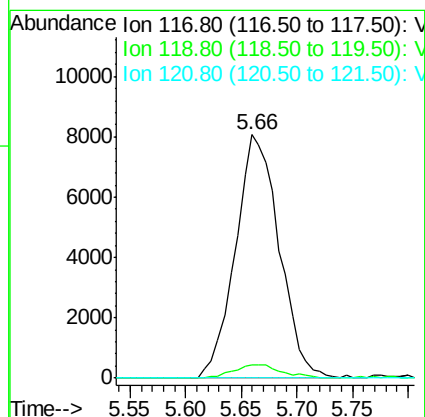
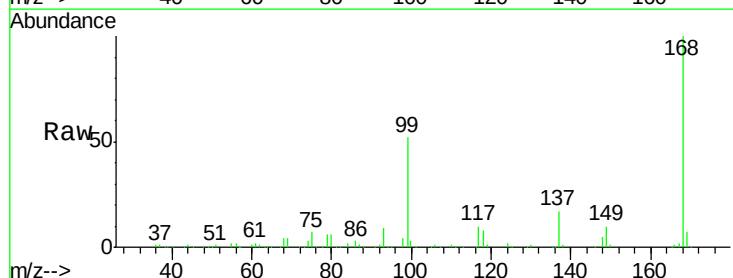
Tgt Ion:117 Resp: 22062

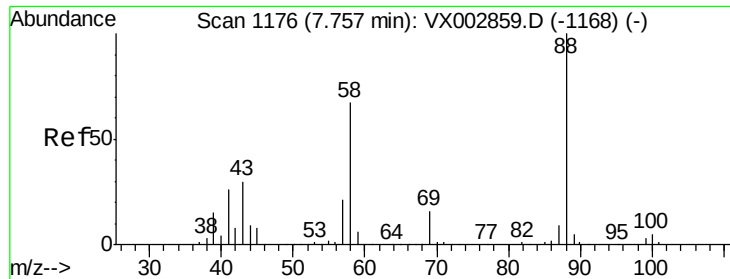
Ion Ratio Lower Upper

117 100

119 5.5 77.4 116.0#

121 0.0 24.4 36.6#

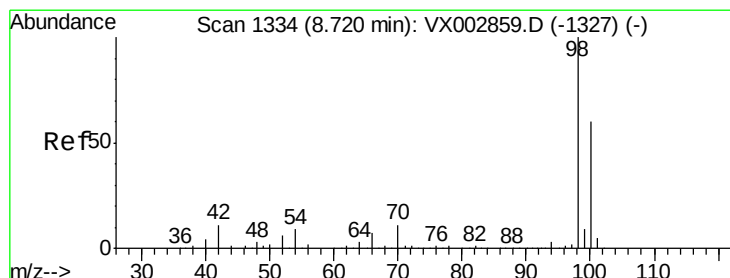
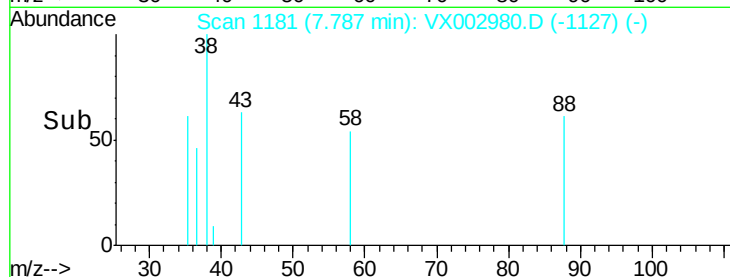
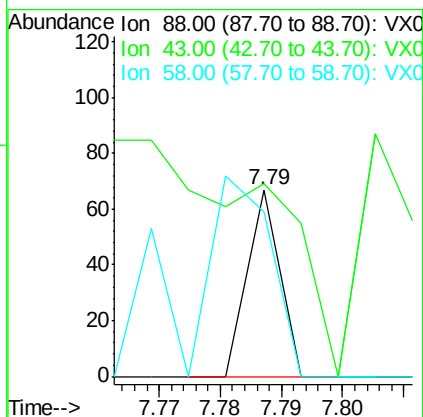
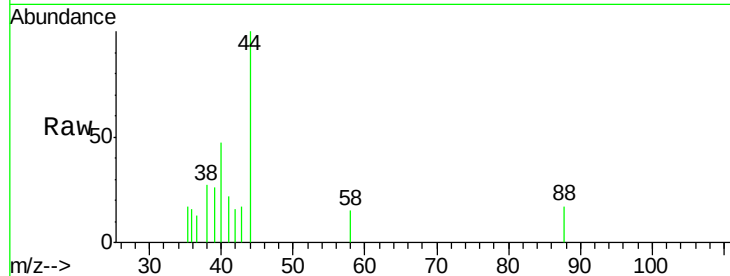




#49  
1,4-Dioxane  
Concen: 0.36 ug/l  
RT: 7.79 min Scan# 1181  
Delta R.T. 0.03 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

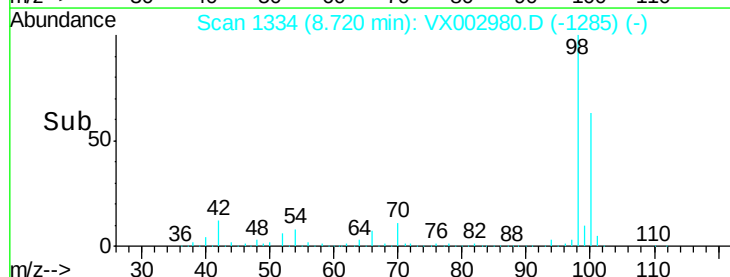
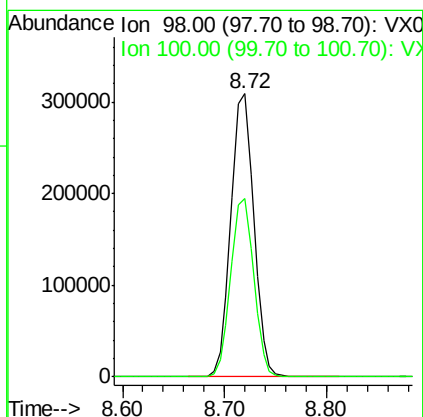
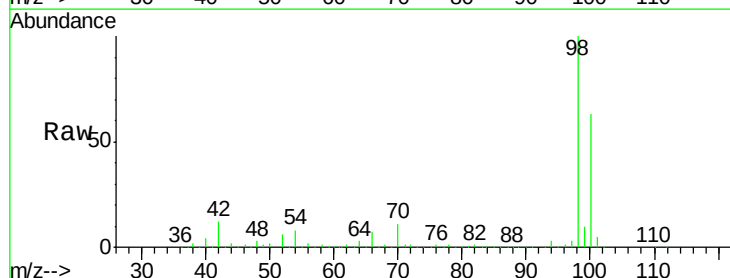
Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0628WBL01

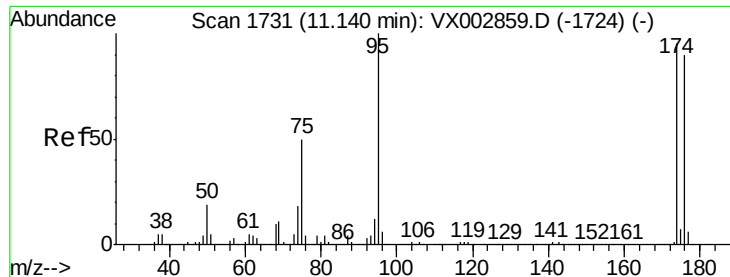
Tot Ion: 88 Resp: 25  
Ion Ratio Lower Upper  
88 100  
43 0.0 29.8 44.6#  
58 268.0 57.1 85.7#



#50  
Toluene-d8  
Concen: 48.13 ug/l  
RT: 8.72 min Scan# 1334  
Delta R.T. 0.00 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

Tgt Ion: 98 Resp: 481775  
Ion Ratio Lower Upper  
98 100  
100 63.5 50.9 76.3

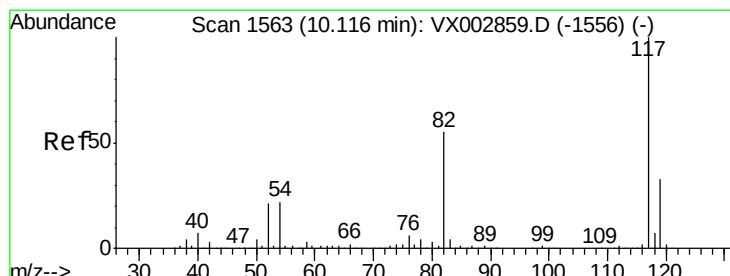
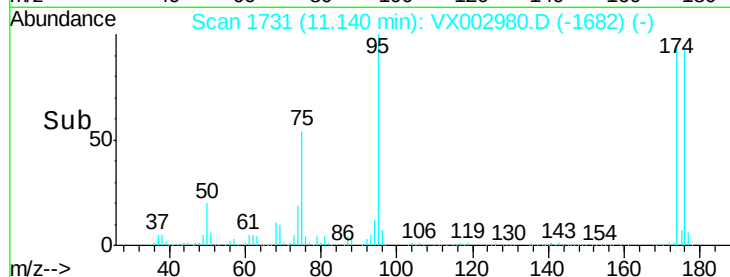
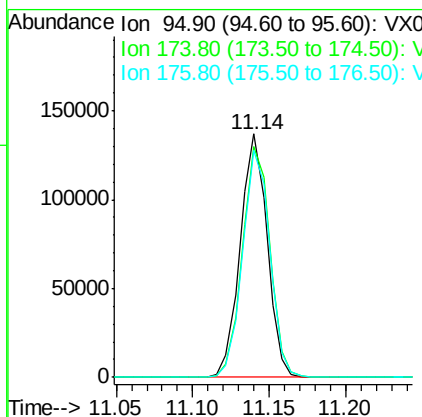
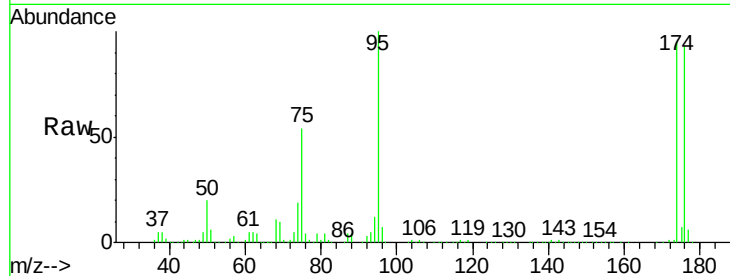




#62  
4-Bromofluorobenzene  
Concen: 43.38 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.00 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

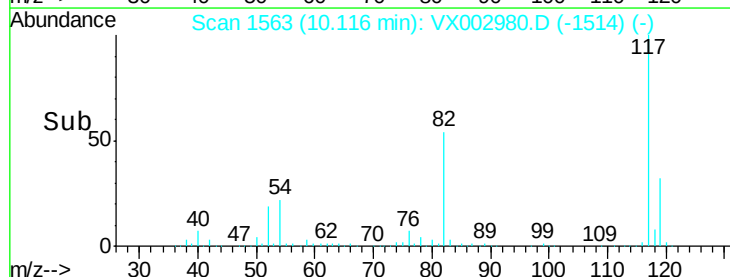
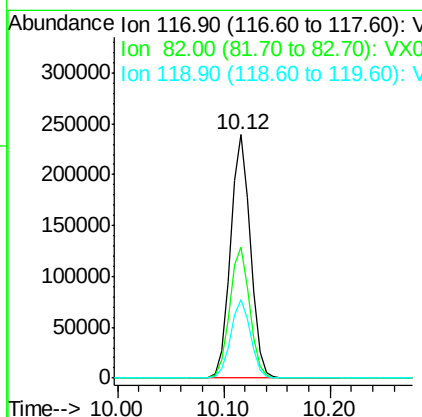
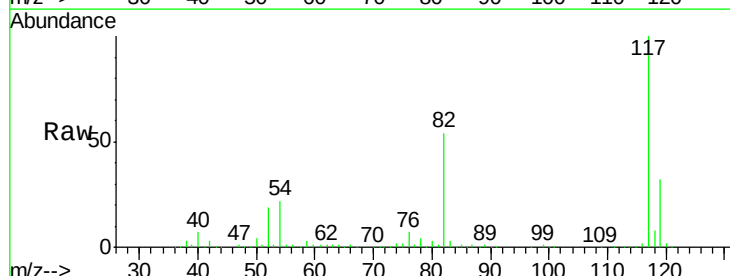
Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0628WBL01

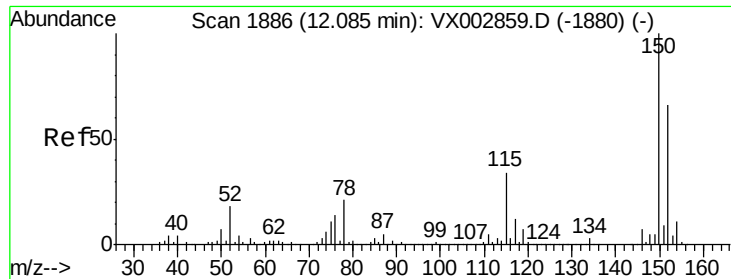
Tot Ion: 95 Resp: 167484  
Ion Ratio Lower Upper  
95 100  
174 97.2 0.0 187.4  
176 94.6 0.0 181.0



#63  
Chlorobenzene-d5  
Concen: 50.00 ug/l  
RT: 10.12 min Scan# 1563  
Delta R.T. -0.00 min  
Lab File: VX002980.D  
Acq: 28 Jun 2018 13:01

Tgt Ion: 117 Resp: 314419  
Ion Ratio Lower Upper  
117 100  
82 53.7 45.0 67.4  
119 32.2 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 12.08 min Scan# 1885

Delta R.T. -0.01 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampled :

VX0628WBL01

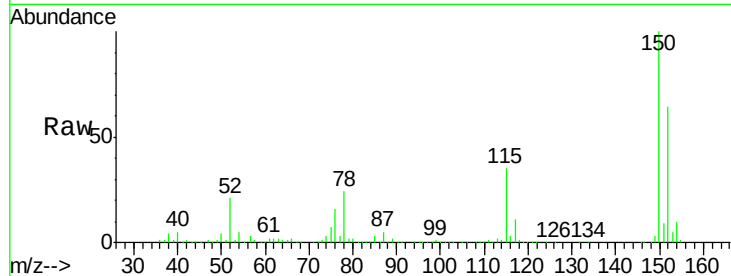
Tot Ion:152 Resp: 177544

Ion Ratio Lower Upper

152 100

115 53.8 40.1 120.2

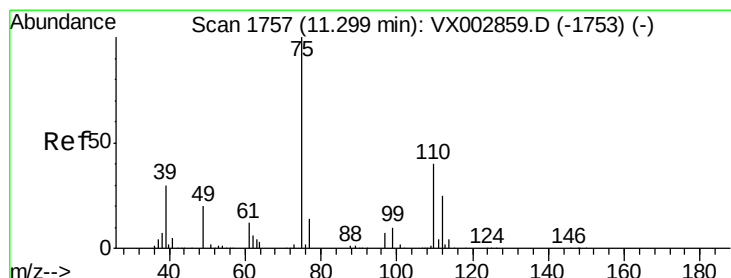
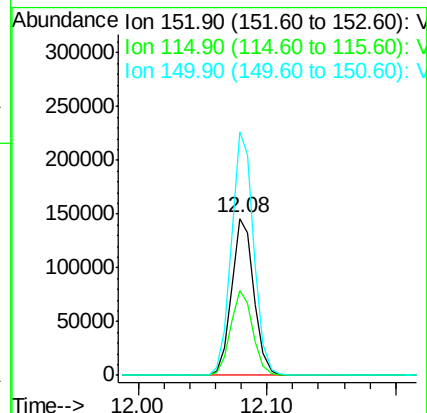
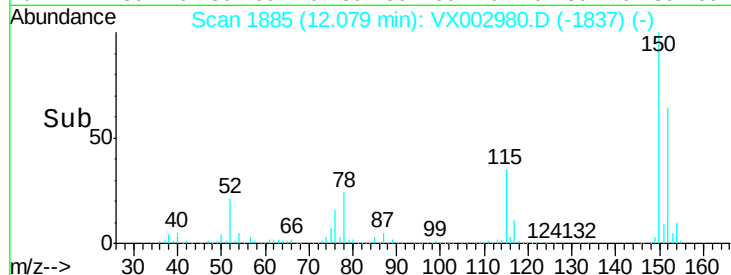
150 155.3 0.0 347.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 27.74 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX002980.D

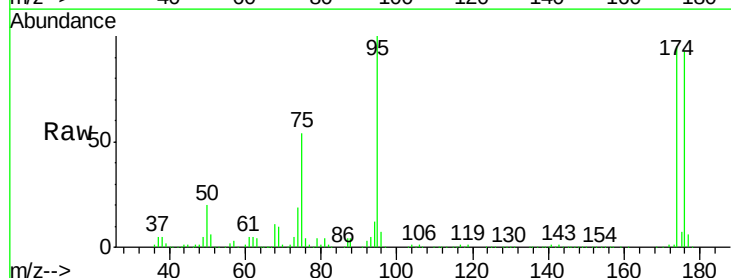
Acq: 28 Jun 2018 13:01

Tgt Ion: 75 Resp: 89196

Ion Ratio Lower Upper

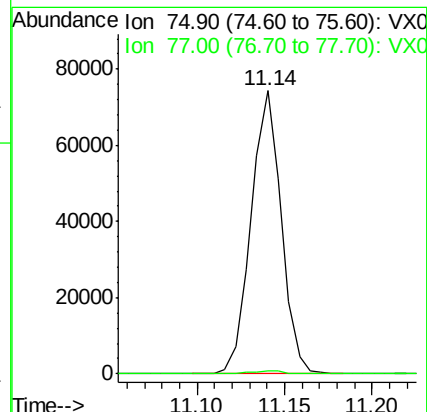
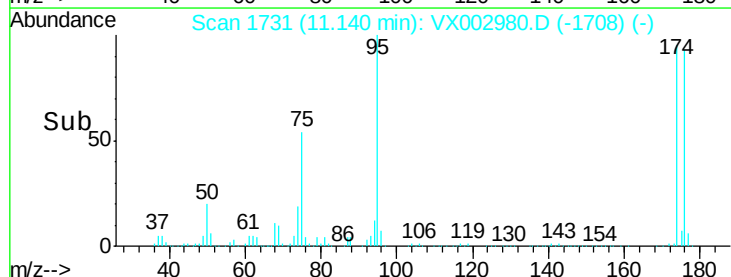
75 100

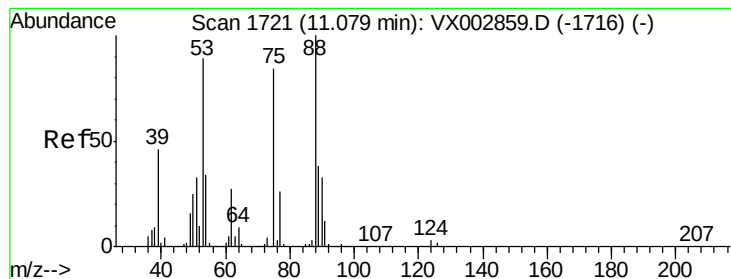
77 1.3 22.8 68.3#



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: 78.42 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.06 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampleId :

VX0628WBL01

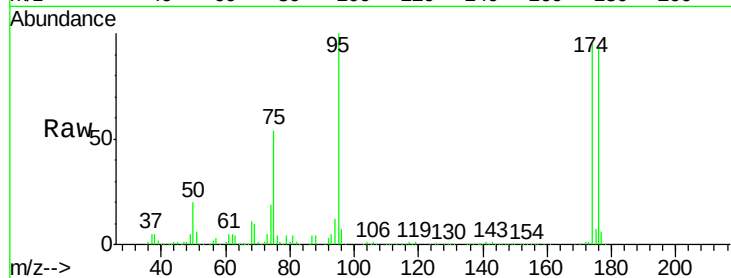
Tot Ion: 75 Resp: 89196

Ion Ratio Lower Upper

75 100

53 0.2 86.8 130.2#

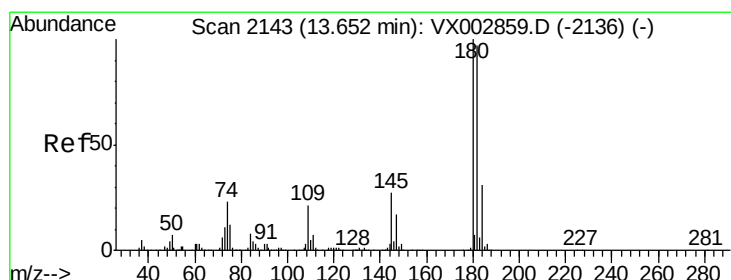
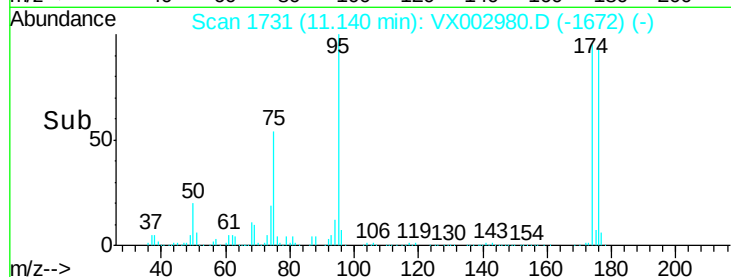
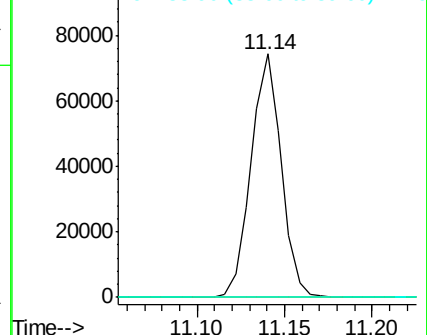
89 0.0 38.2 57.2#



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: 0.24 ug/l

RT: 13.65 min Scan# 2142

Delta R.T. -0.01 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

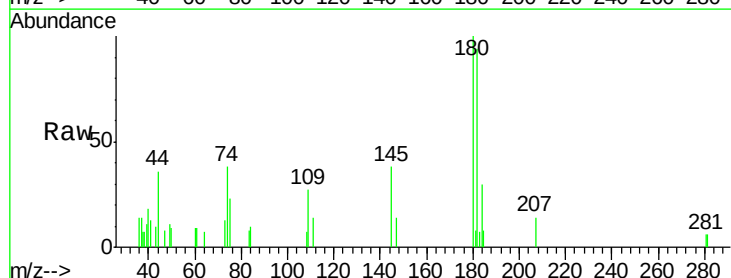
Tgt Ion: 180 Resp: 1091

Ion Ratio Lower Upper

180 100

182 93.3 47.7 143.1

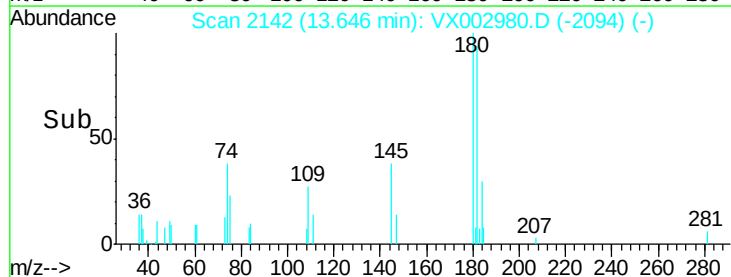
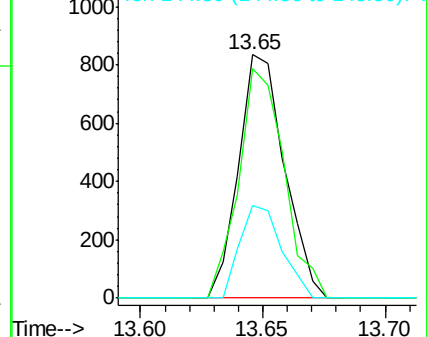
145 34.4 14.1 42.4

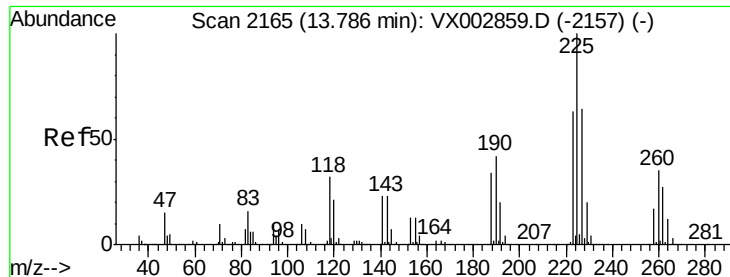


Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V





#94

Hexachlorobutadiene

Concen: 0.29 ug/l

RT: 13.79 min Scan# 2165

Delta R.T. -0.00 min

Lab File: VX002980.D

Acq: 28 Jun 2018 13:01

Instrument :

MSVOA\_X

ClientSampled :

VX0628WBL01

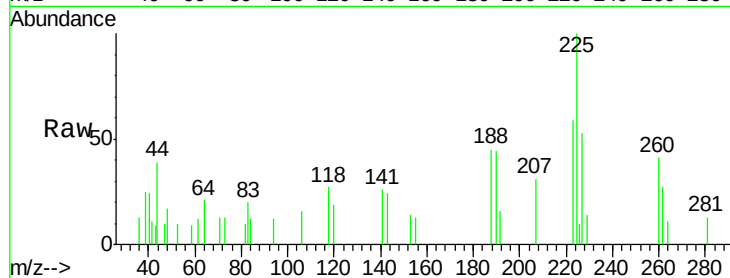
Tot Ion:225 Resp: 670

Ion Ratio Lower Upper

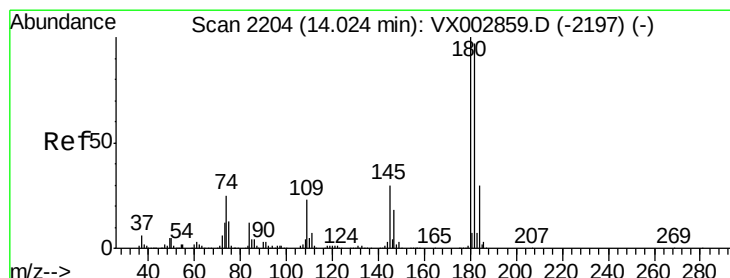
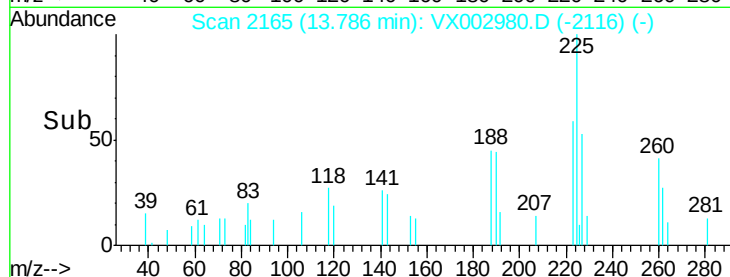
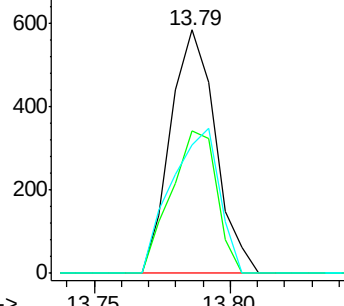
225 100

223 59.3 31.6 95.0

227 63.7 32.4 97.2



Abundance Ion 224.70 (224.40 to 225.40): V  
Ion 222.70 (222.40 to 223.40): V  
Ion 226.70 (226.40 to 227.40): 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: VX002980.D

Acq: 28 Jun 2018 13:01

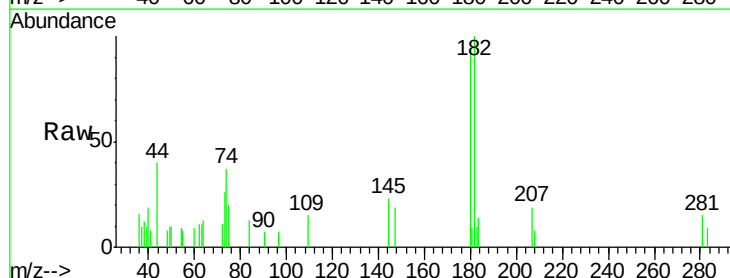
Tgt Ion:180 Resp: 972

Ion Ratio Lower Upper

180 100

182 92.5 48.0 144.0

145 27.1 14.8 44.3



Abundance Ion 179.80 (179.50 to 180.50): V  
Ion 181.80 (181.50 to 182.50): V  
Ion 144.90 (144.60 to 145.60): V

