

Data Path : W:\HPCHEM1\MSVOA\_X\DATA\VX051118\  
 Data File : VX001629.D  
 Acq On : 11 May 2018 04:22  
 Operator : JC/MD  
 Sample : J2801-01  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SEWER-OUTFALL-001

Quant Time: May 11 07:25:19 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\624X051118W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri May 11 07:16:13 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.03  | 128  | 52723    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 6.87  | 114  | 290523   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 10.12 | 117  | 261251   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 6.07   | 65    | 123455   | 32.09    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 106.97% |
| 60) 4-Bromofluorobenzene  | 11.14  | 95    | 120193   | 29.07    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 96.90%  |
| 63) Toluene-d8            | 8.72   | 98    | 338313   | 29.04    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 96.80%  |

## Target Compounds

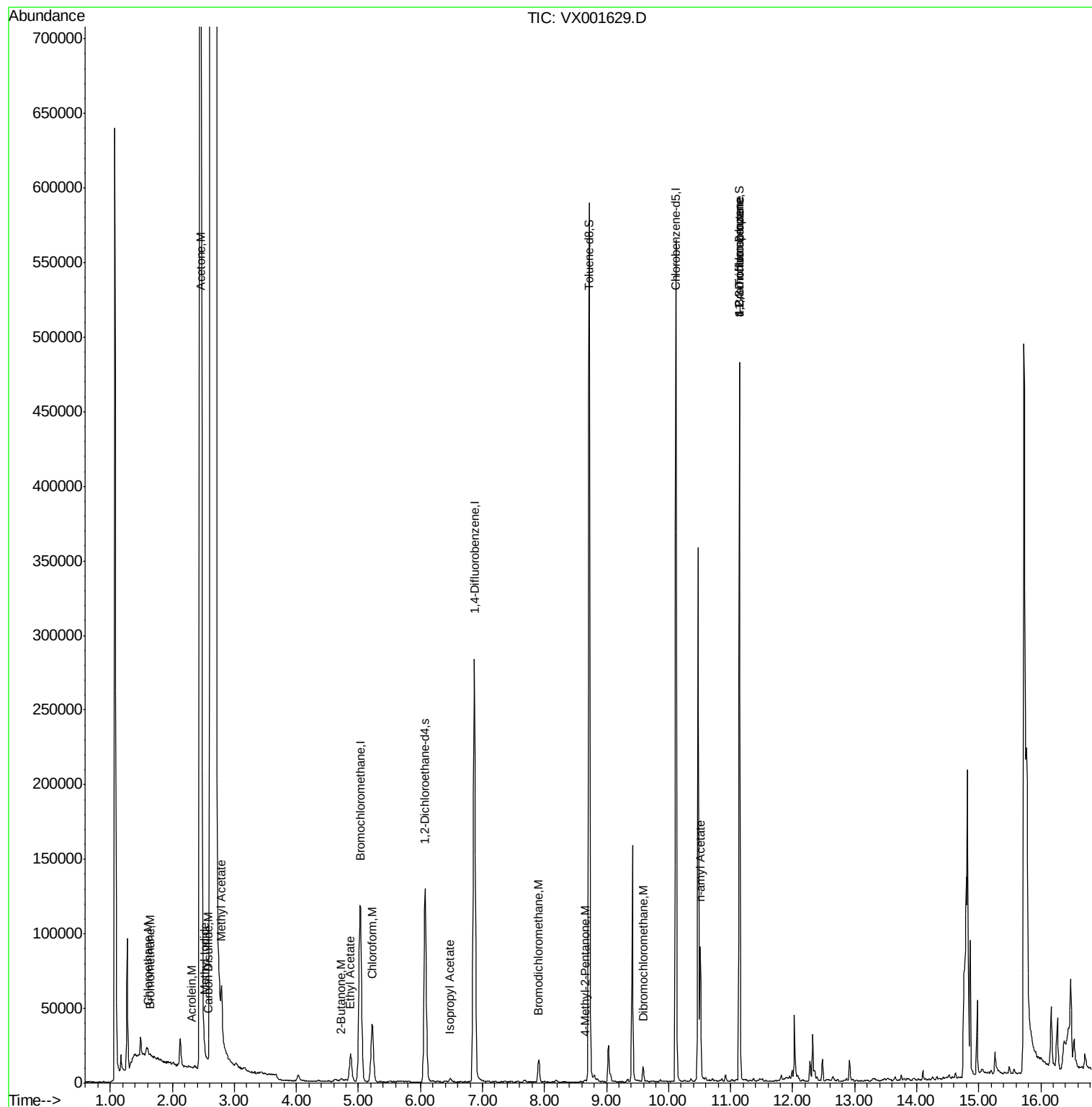
|                             |       |     |        |         |        | Qvalue |
|-----------------------------|-------|-----|--------|---------|--------|--------|
| 5) Bromomethane             | 1.65  | 94  | 1327   | 0.90    | ug/l   | 95     |
| 6) Chloroethane             | 1.62  | 64  | 479    | 0.24    | ug/l # | 59     |
| 11) Methyl Iodide           | 2.52  | 142 | 2022   | 0.57    | ug/l   | 85     |
| 12) Methyl Acetate          | 2.79  | 43  | 43041  | 10.37   | ug/l   | 97     |
| 13) Acrolein                | 2.31  | 56  | 224    | 0.48    | ug/l   | 83     |
| 15) Acetone                 | 2.45  | 58  | 949331 | 2132.05 | ug/l   | 96     |
| 16) Carbon Disulfide        | 2.57  | 76  | 1892   | 0.31    | ug/l   | 95     |
| 25) Chloroform              | 5.22  | 83  | 44721  | 8.68    | ug/l   | 94     |
| 30) 2-Butanone              | 4.72  | 43  | 3132   | 1.30    | ug/l # | 98     |
| 41) Bromodichloromethane    | 7.91  | 83  | 8833   | 2.24    | ug/l # | 98     |
| 43) Ethyl Acetate           | 4.87  | 43  | 31464  | 6.85    | ug/l   | 96     |
| 44) Isopropyl Acetate       | 6.48  | 43  | 2945   | 0.42    | ug/l # | 87     |
| 47) n-amyl Acetate          | 10.51 | 43  | 41595  | 6.93    | ug/l   | 93     |
| 53) Dibromochloromethane    | 9.59  | 129 | 2036   | 0.63    | ug/l   | 96     |
| 58) 4-Methyl-2-Pentanone    | 8.65  | 43  | 1507   | 0.32    | ug/l # | 45     |
| 72) 1,2,3-Trichloropropane  | 11.14 | 75  | 58648  | 13.60   | ug/l   | 40     |
| 77) t-1,4-Dichloro-2-butene | 11.14 | 75  | 58648  | 52.87   | ug/l # | 4      |

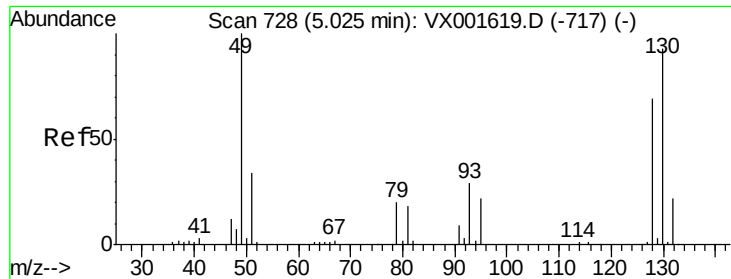
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ClientSampleId :  
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Quant Time: May 11 07:25:19 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\624X051118W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Fri May 11 07:16:13 2018  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.00 ug/l

RT: 5.03 min Scan# 728

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

SEWER-OUTFALL-001

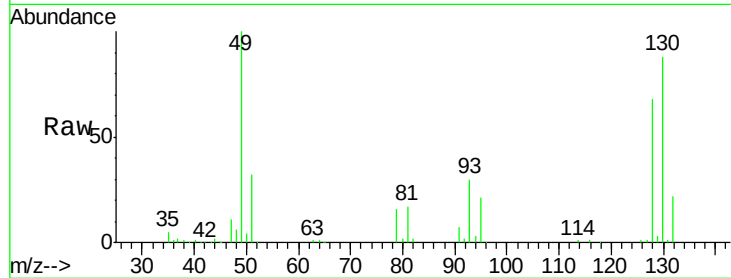
Tgt Ion:128 Resp: 52723

Ion Ratio Lower Upper

128 100

49 143.5 0.0 372.0

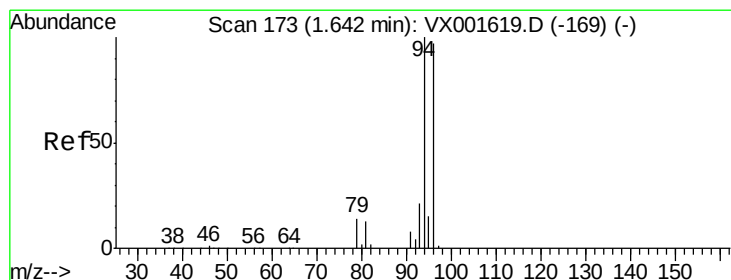
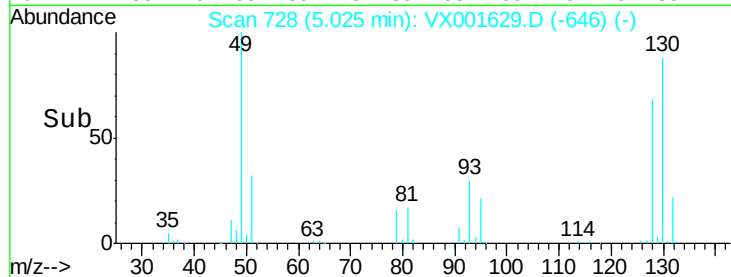
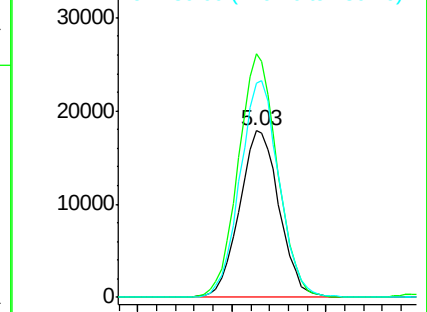
130 128.1 0.0 326.5



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VX0

Ion 130.00 (129.70 to 130.70): V



#5

Bromomethane

Concen: 0.90 ug/l

RT: 1.65 min Scan# 174

Delta R.T. 0.01 min

Lab File: VX001629.D

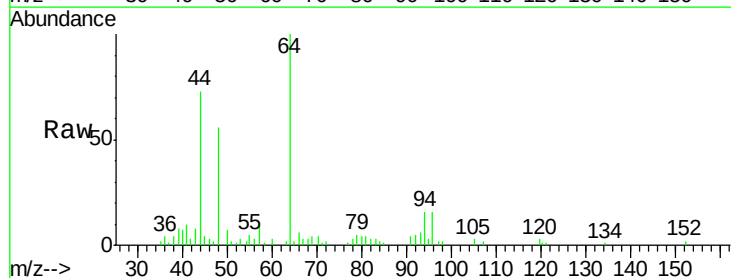
Acq: 11 May 2018 04:22

Tgt Ion: 94 Resp: 1327

Ion Ratio Lower Upper

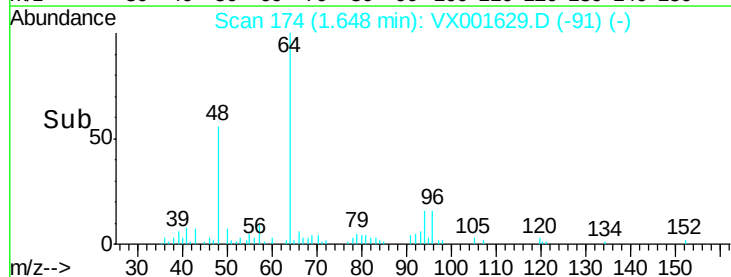
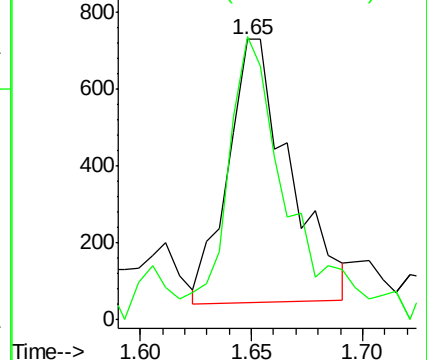
94 100

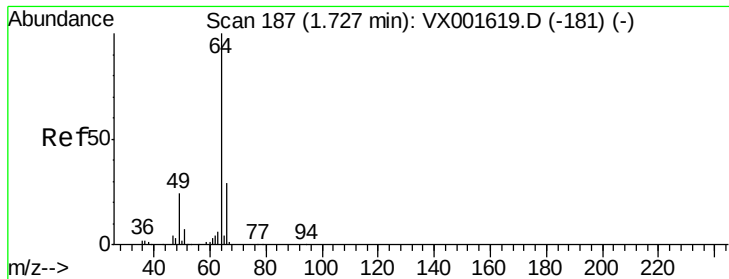
96 102.0 77.8 116.8



Abundance Ion 94.00 (93.70 to 94.70): VX0

Ion 96.00 (95.70 to 96.70): VX0





#6

Chloroethane

Concen: 0.24 ug/l

RT: 1.62 min Scan# 169

Delta R.T. -0.11 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

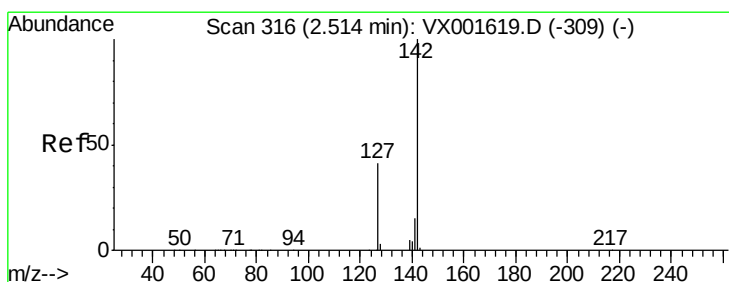
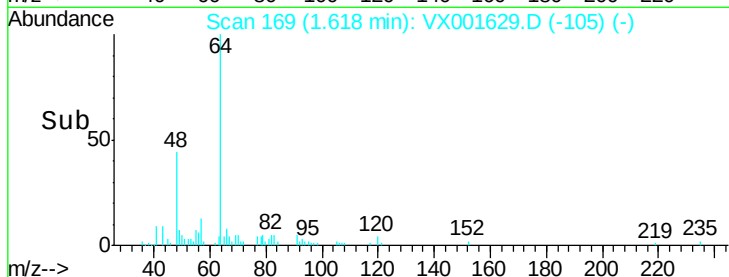
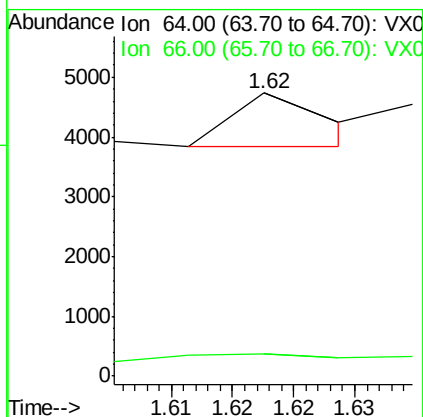
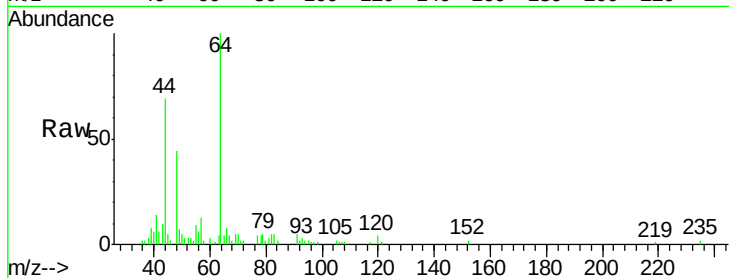
SEWER-OUTFALL-001

Tgt Ion: 64 Resp: 479

Ion Ratio Lower Upper

64 100

66 7.1 23.4 35.2#



#11

Methyl Iodide

Concen: 0.57 ug/l

RT: 2.52 min Scan# 317

Delta R.T. 0.01 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

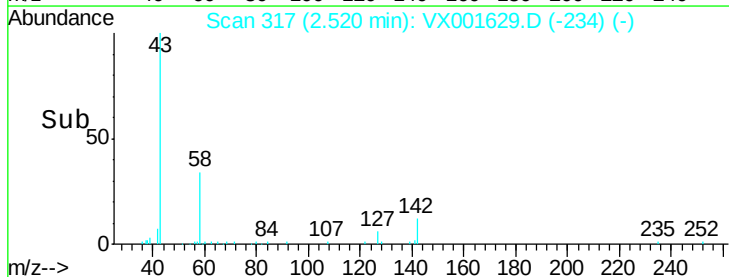
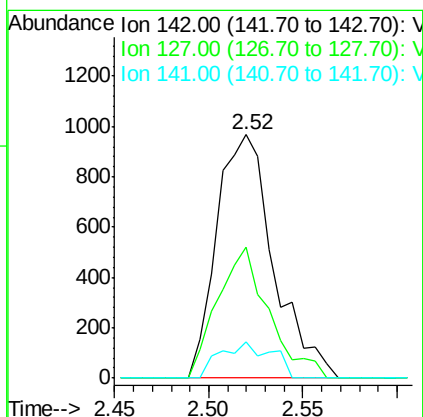
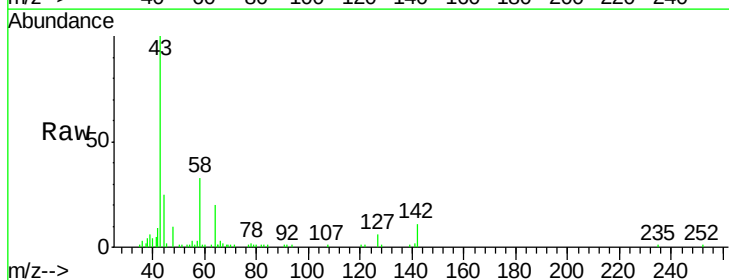
Tgt Ion: 142 Resp: 2022

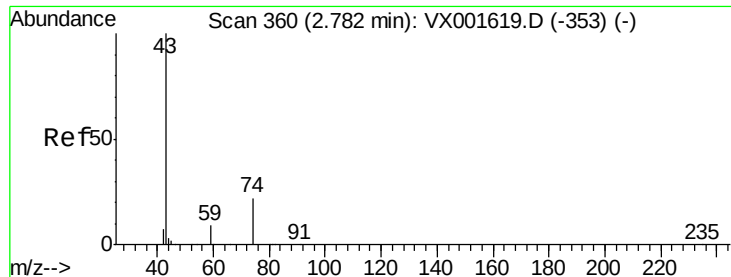
Ion Ratio Lower Upper

142 100

127 54.0 20.7 62.1

141 14.8 7.4 22.3

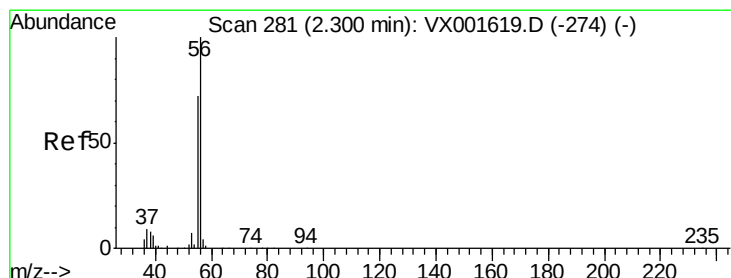
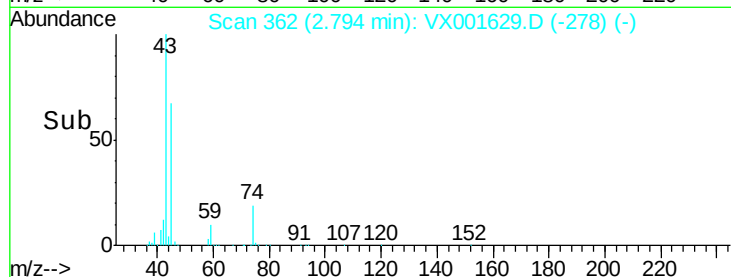
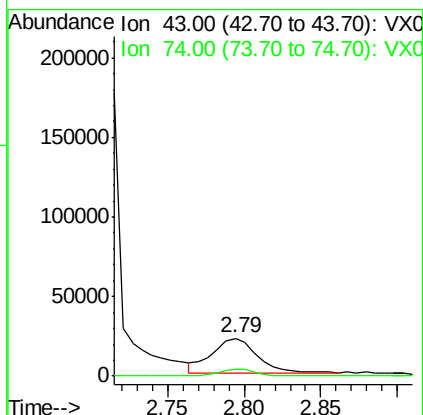
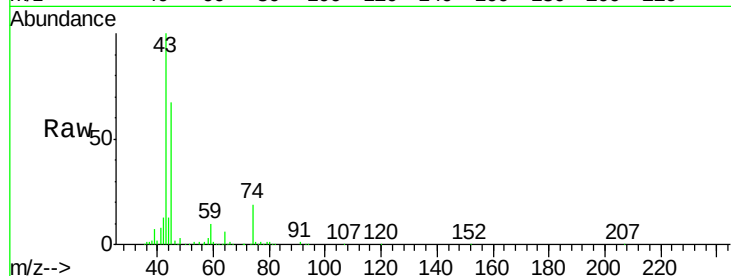




#12  
Methyl Acetate  
Concen: 10.37 ug/l  
RT: 2.79 min Scan# 362  
Delta R.T. 0.01 min  
Lab File: VX001629.D  
Acq: 11 May 2018 04:22

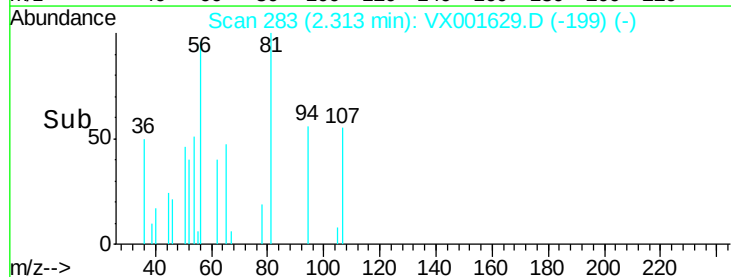
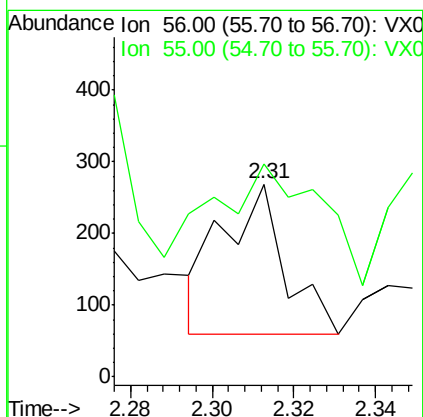
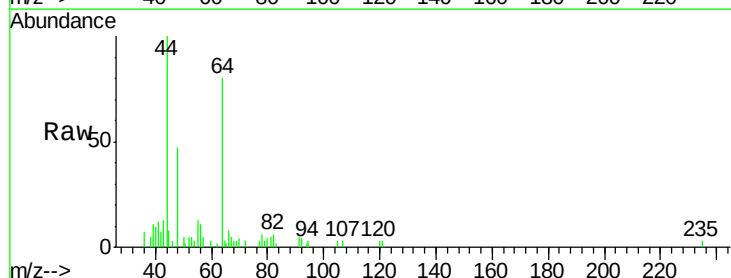
Instrument :  
MSVOA\_X  
ClientSampleId :  
SEWER-OUTFALL-001

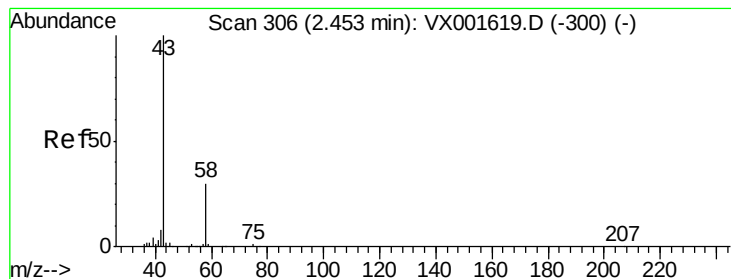
Tgt Ion: 43 Resp: 43041  
Ion Ratio Lower Upper  
43 100  
74 24.1 18.0 27.0



#13  
Acrolein  
Concen: 0.48 ug/l  
RT: 2.31 min Scan# 283  
Delta R.T. 0.01 min  
Lab File: VX001629.D  
Acq: 11 May 2018 04:22

Tgt Ion: 56 Resp: 224  
Ion Ratio Lower Upper  
56 100  
55 85.3 56.9 85.3





#15

Acetone

Concen: 2132.05 ug/l

RT: 2.45 min Scan# 306

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

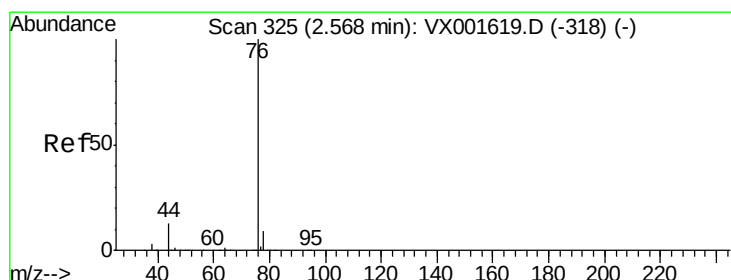
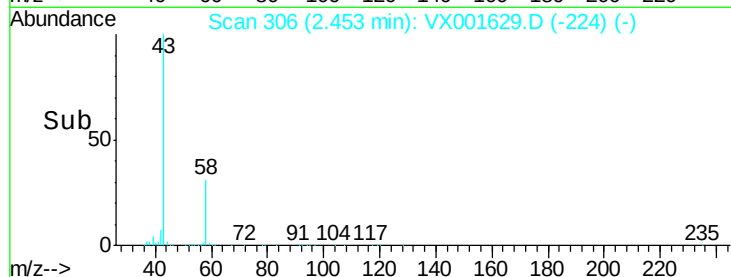
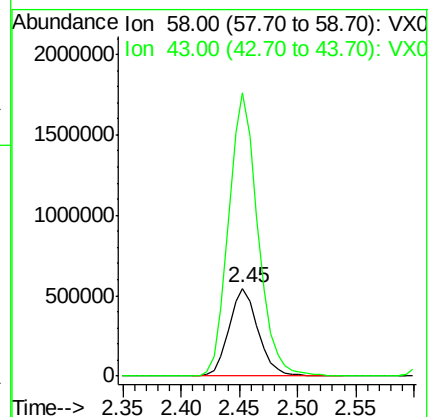
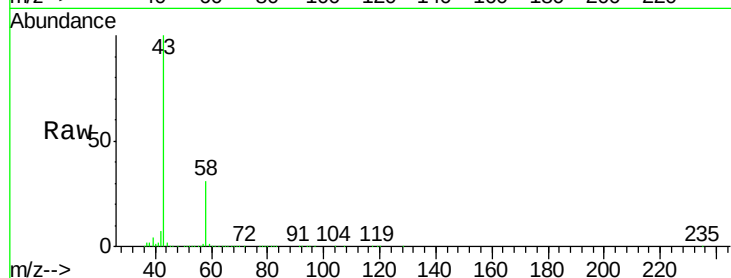
SEWER-OUTFALL-001

Tgt Ion: 58 Resp: 949331

Ion Ratio Lower Upper

58 100

43 321.0 264.2 396.2



#16

Carbon Disulfide

Concen: 0.31 ug/l

RT: 2.57 min Scan# 326

Delta R.T. 0.01 min

Lab File: VX001629.D

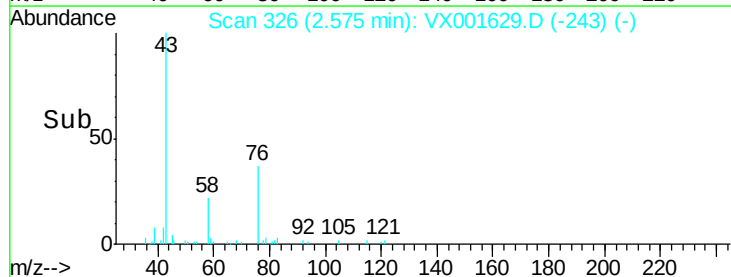
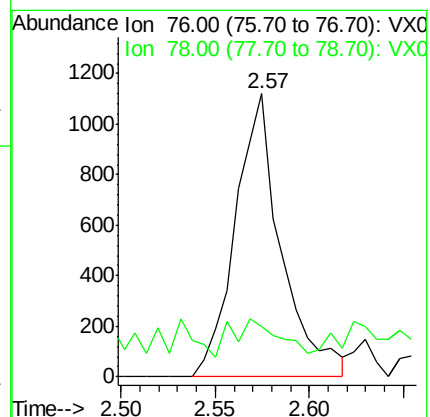
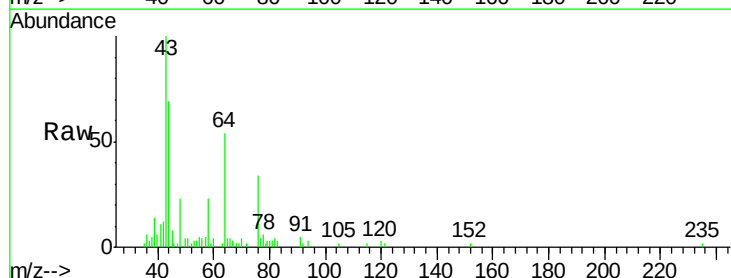
Acq: 11 May 2018 04:22

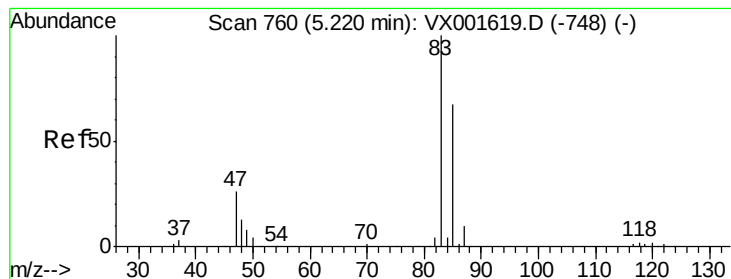
Tgt Ion: 76 Resp: 1892

Ion Ratio Lower Upper

76 100

78 7.3 7.3 10.9





#25

Chloroform

Concen: 8.68 ug/l

RT: 5.22 min Scan# 760

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

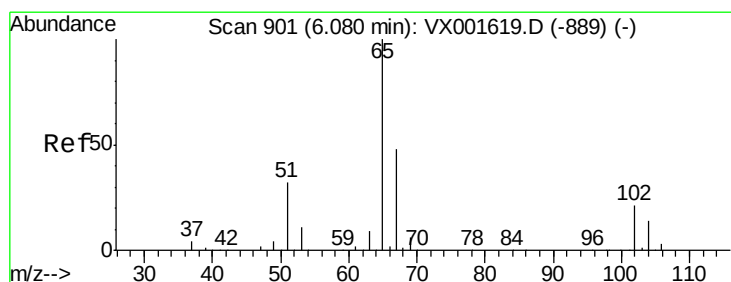
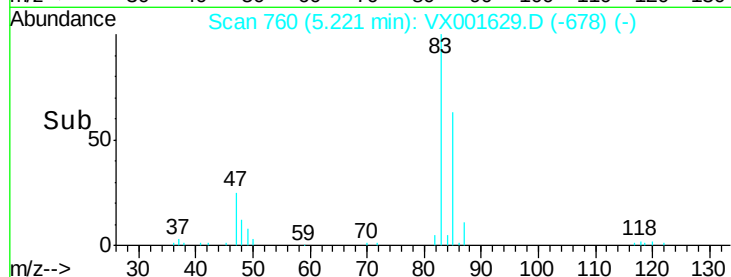
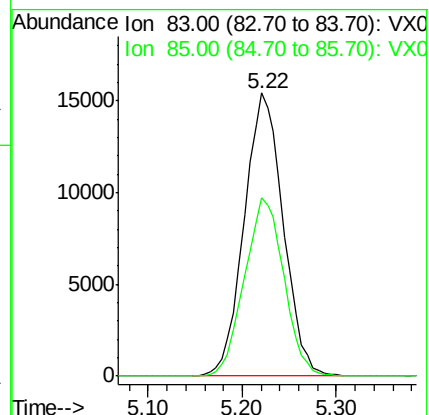
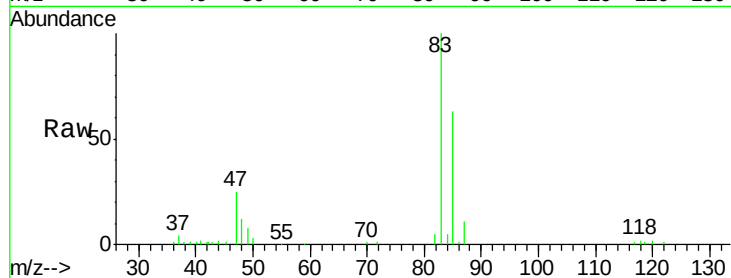
SEWER-OUTFALL-001

Tgt Ion: 83 Resp: 44721

Ion Ratio Lower Upper

83 100

85 62.9 53.9 80.9



#27

1,2-Dichloroethane-d4

Concen: 32.09 ug/l

RT: 6.07 min Scan# 900

Delta R.T. -0.01 min

Lab File: VX001629.D

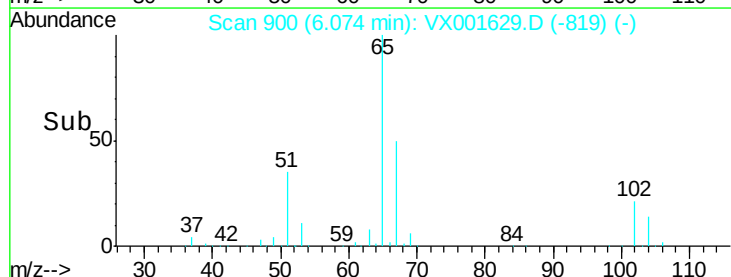
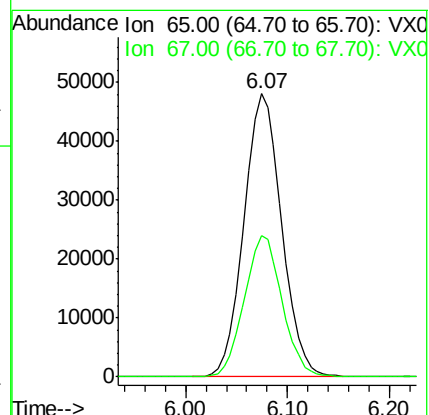
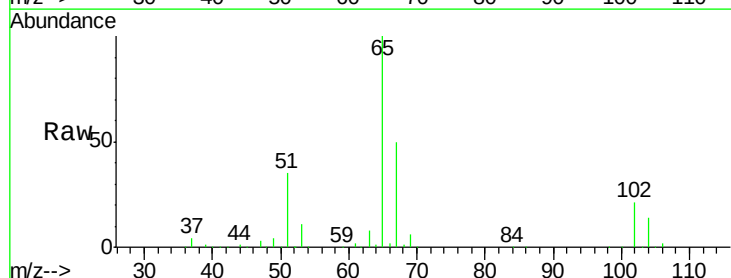
Acq: 11 May 2018 04:22

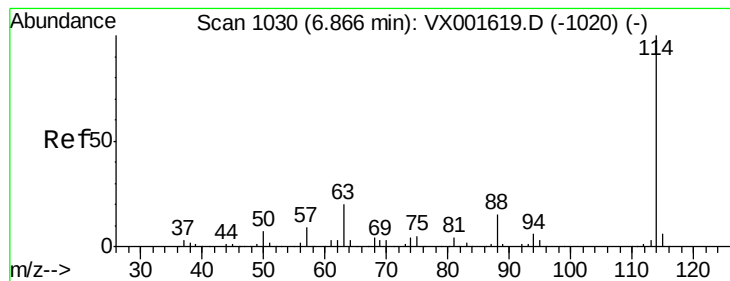
Tgt Ion: 65 Resp: 123455

Ion Ratio Lower Upper

65 100

67 49.9 40.2 60.2





#28

1,4-Difluorobenzene

Concen: 30.00 ug/l

RT: 6.87 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

SEWER-OUTFALL-001

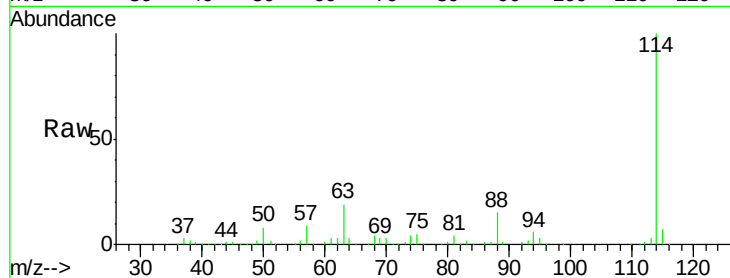
Tgt Ion:114 Resp: 290523

Ion Ratio Lower Upper

114 100

63 19.6 15.5 23.3

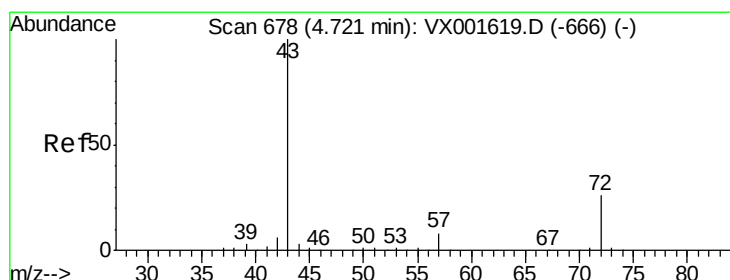
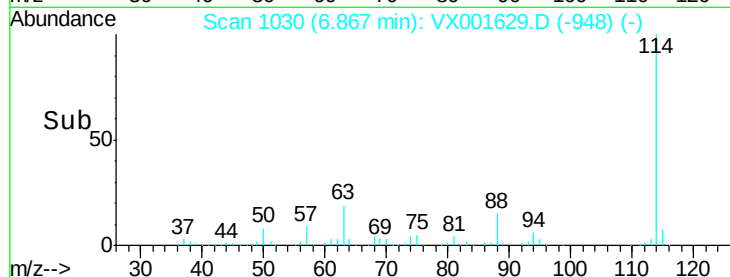
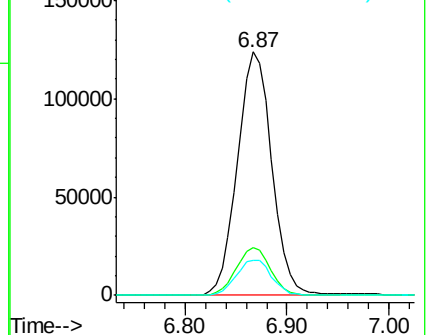
88 14.9 12.2 18.4



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 88.00 (87.70 to 88.70): VX0



#30

2-Butanone

Concen: 1.30 ug/l

RT: 4.72 min Scan# 678

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

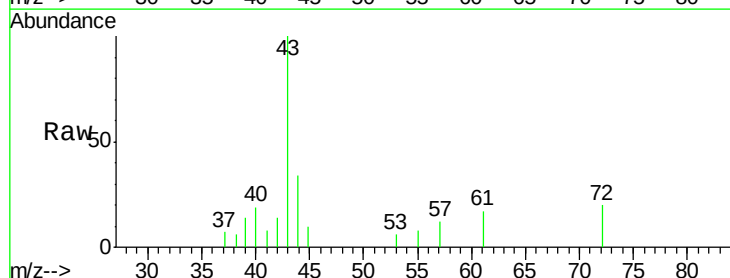
Tgt Ion: 43 Resp: 3132

Ion Ratio Lower Upper

43 100

57 6.2 6.3 9.5#

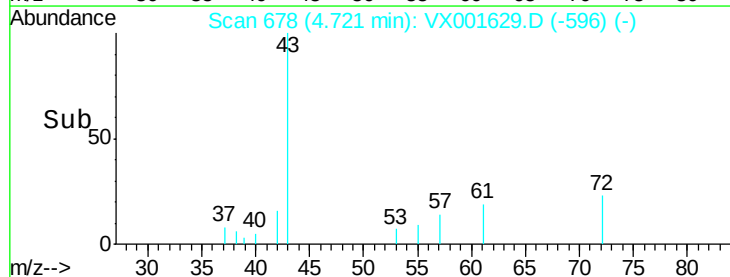
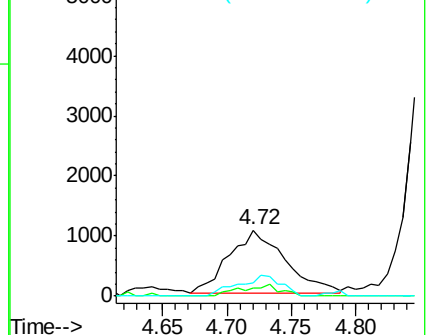
72 24.9 20.2 30.4



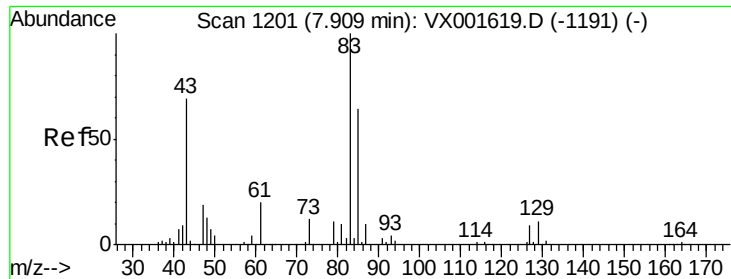
Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

Ion 72.00 (71.70 to 72.70): VX0







#41

Bromodichloromethane

Concen: 2.24 ug/l

RT: 7.91 min Scan# 1201

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

SEWER-OUTFALL-001

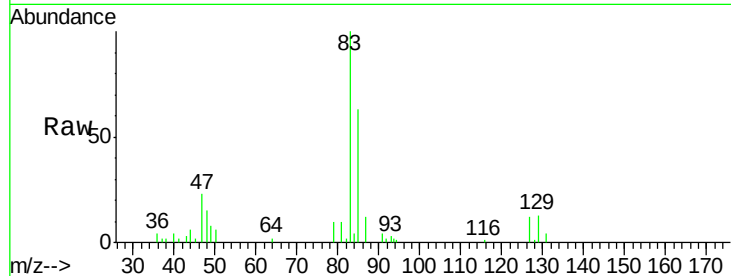
Tgt Ion: 83 Resp: 8833

Ion Ratio Lower Upper

83 100

85 62.8 51.3 76.9

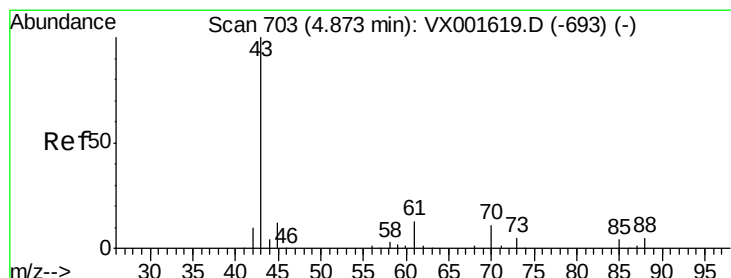
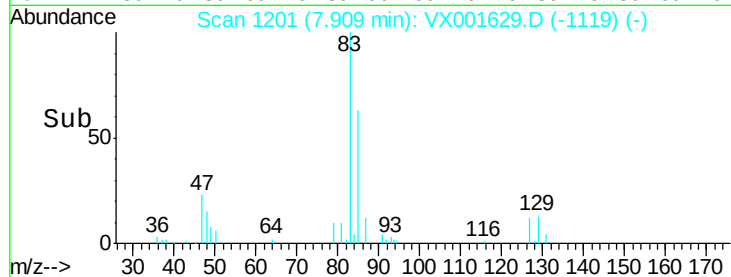
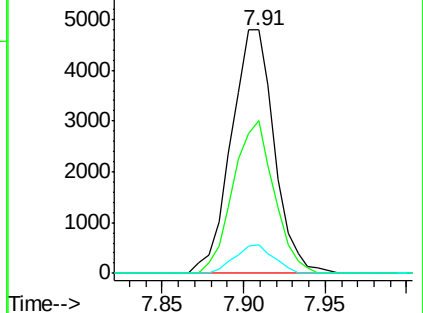
127 11.6 7.5 11.3#



Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 85.00 (84.70 to 85.70): VX0

Ion 127.00 (126.70 to 127.70): V



#43

Ethyl Acetate

Concen: 6.85 ug/l

RT: 4.87 min Scan# 703

Delta R.T. 0.00 min

Lab File: VX001629.D

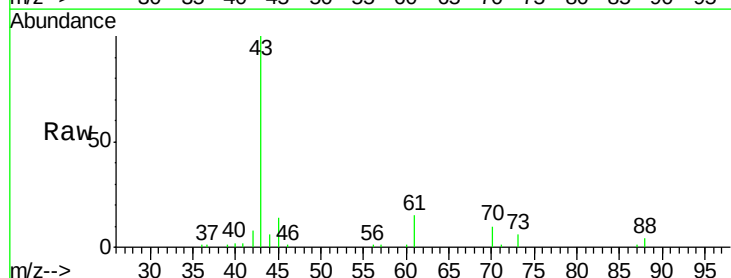
Acq: 11 May 2018 04:22

Tgt Ion: 43 Resp: 31464

Ion Ratio Lower Upper

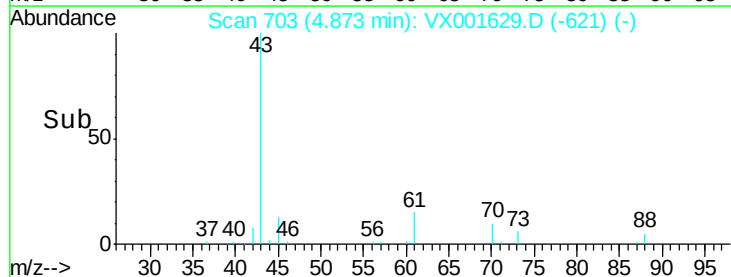
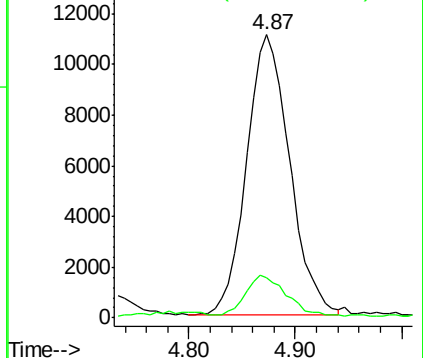
43 100

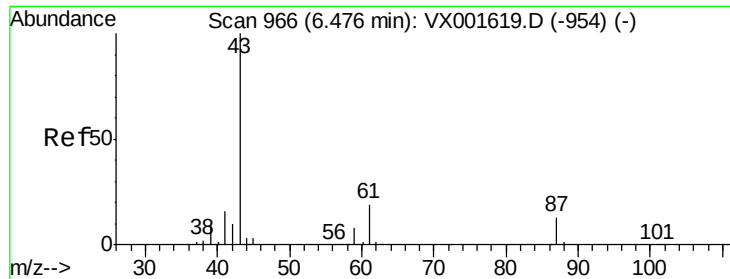
45 14.3 12.7 19.1



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 45.00 (44.70 to 45.70): VX0





#44

Isopropyl Acetate

Concen: 0.42 ug/l

RT: 6.48 min Scan# 967

Delta R.T. 0.01 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

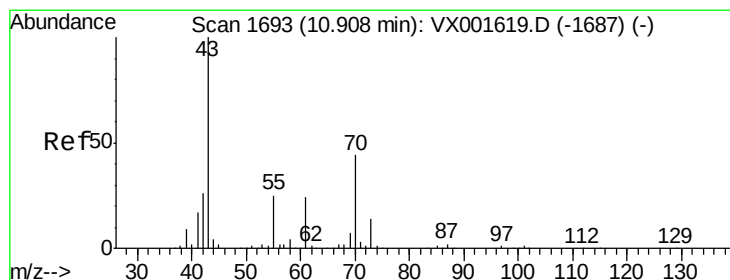
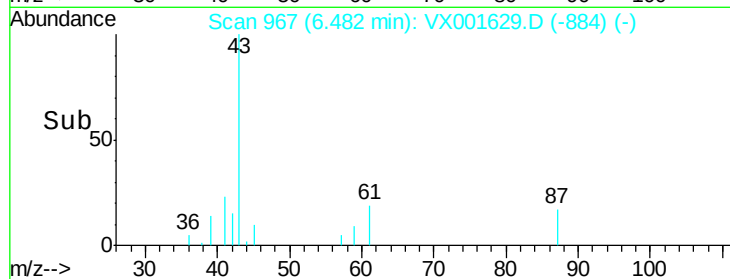
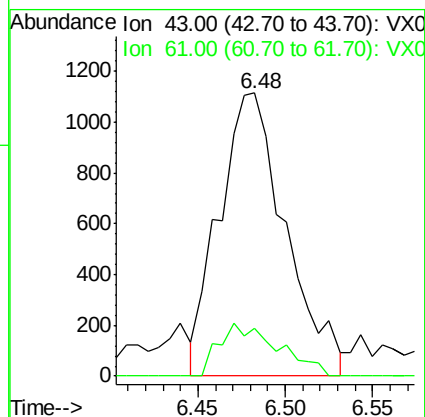
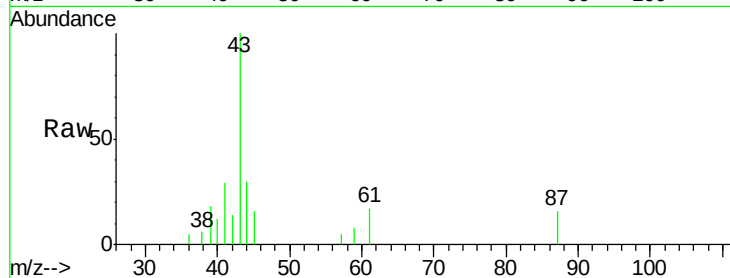
SEWER-OUTFALL-001

Tgt Ion: 43 Resp: 2945

Ion Ratio Lower Upper

43 100

61 13.0 15.1 22.7#



#47

n-amyl Acetate

Concen: 6.93 ug/l

RT: 10.51 min Scan# 1628

Delta R.T. -0.40 min

Lab File: VX001629.D

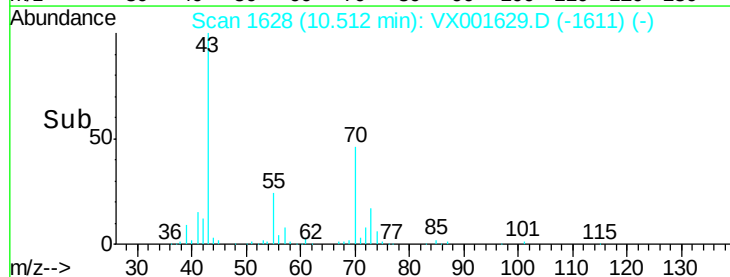
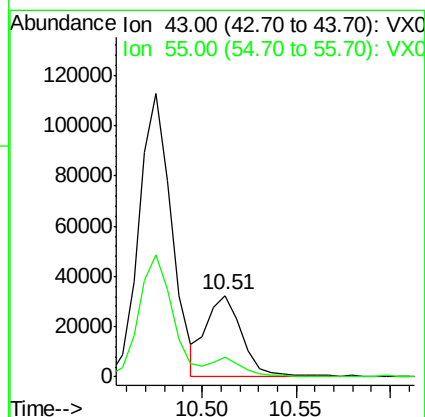
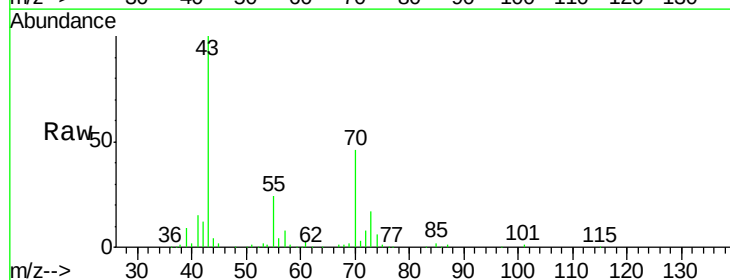
Acq: 11 May 2018 04:22

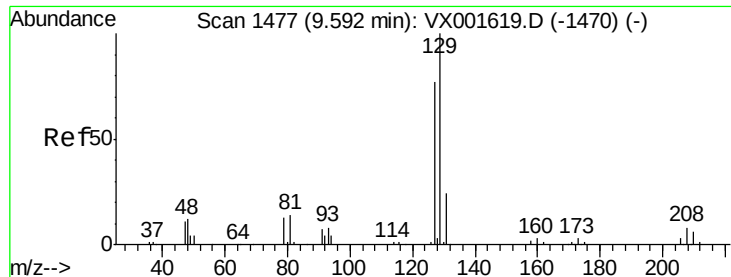
Tgt Ion: 43 Resp: 41595

Ion Ratio Lower Upper

43 100

55 22.3 20.8 31.2

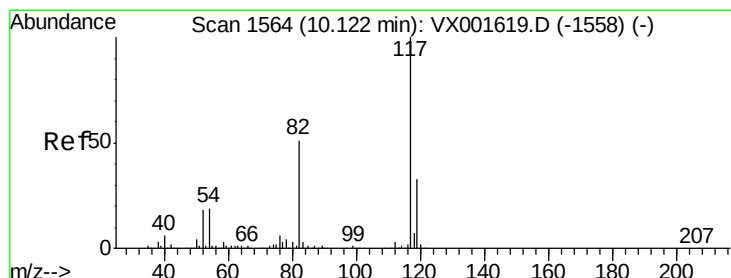
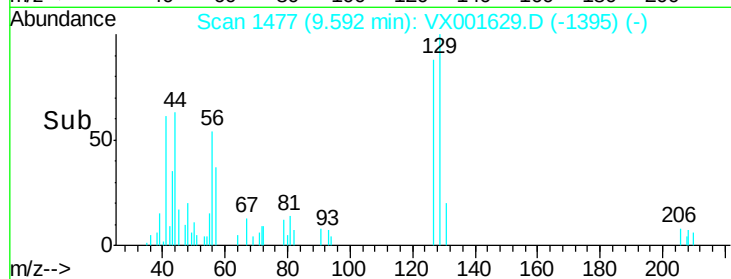
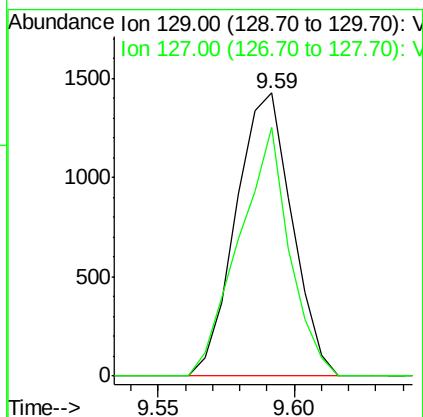
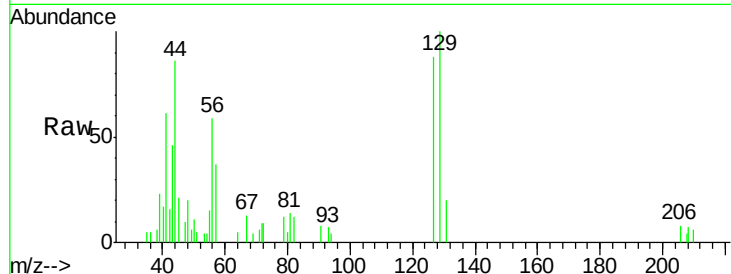




#53  
 Dibromochloromethane  
 Concen: 0.63 ug/l  
 RT: 9.59 min Scan# 1477  
 Delta R.T. 0.00 min  
 Lab File: VX001629.D  
 Acq: 11 May 2018 04:22

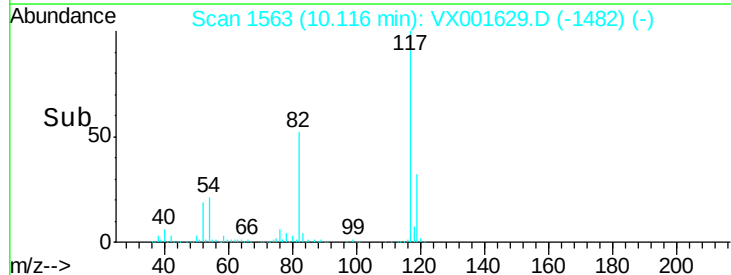
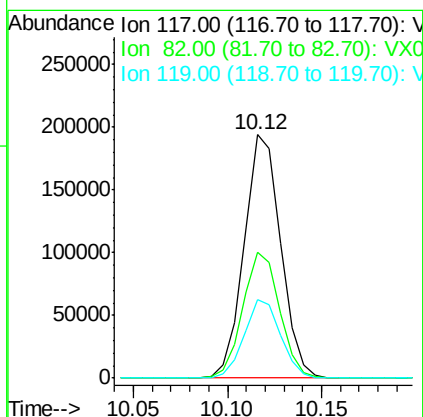
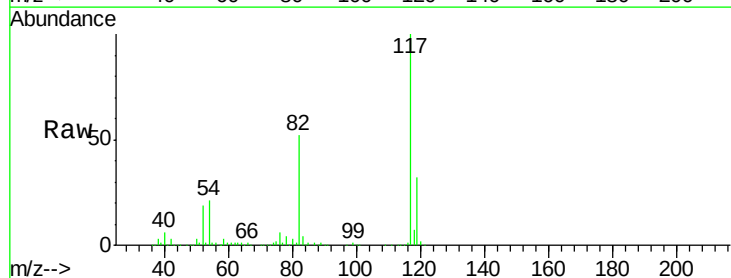
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SEWER-OUTFALL-001

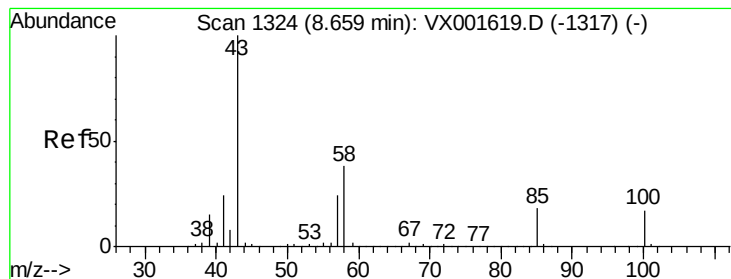
Tgt Ion:129 Resp: 2036  
 Ion Ratio Lower Upper  
 129 100  
 127 79.1 37.9 113.7



#57  
 Chlorobenzene-d5  
 Concen: 30.00 ug/l  
 RT: 10.12 min Scan# 1563  
 Delta R.T. -0.01 min  
 Lab File: VX001629.D  
 Acq: 11 May 2018 04:22

Tgt Ion:117 Resp: 261251  
 Ion Ratio Lower Upper  
 117 100  
 82 51.8 42.2 63.2  
 119 32.2 26.3 39.5





#58

4-Methyl-2-Pentanone

Concen: 0.32 ug/l

RT: 8.65 min Scan# 1323

Delta R.T. -0.01 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

SEWER-OUTFALL-001

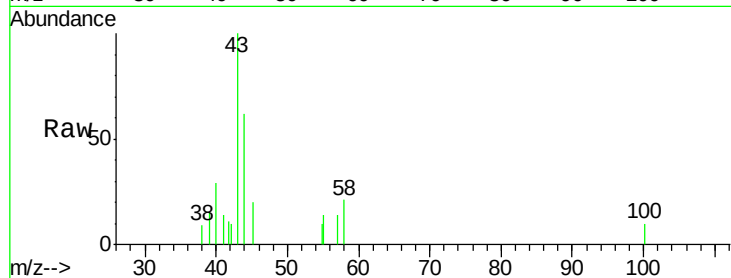
Tgt Ion: 43 Resp: 1507

Ion Ratio Lower Upper

43 100

58 0.0 30.4 45.6#

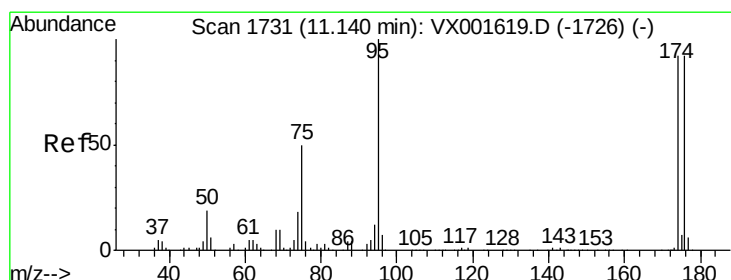
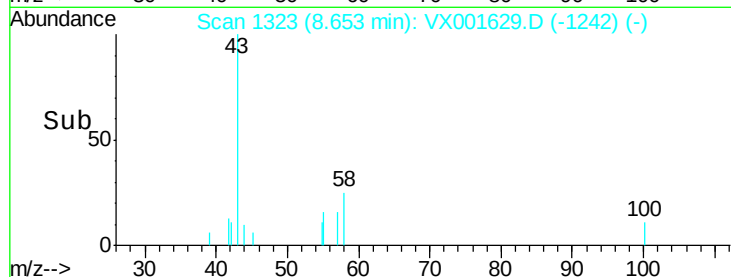
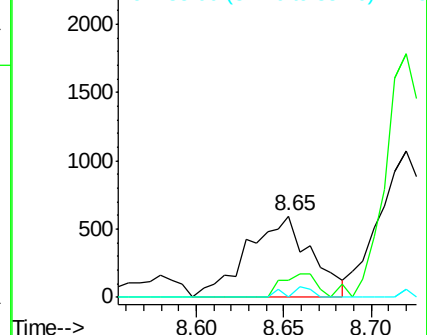
85 1.5 14.3 21.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

Ion 85.00 (84.70 to 85.70): VX0



#60

4-Bromofluorobenzene

Concen: 29.07 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

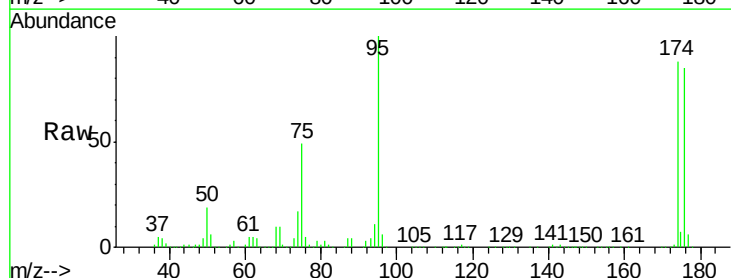
Tgt Ion: 95 Resp: 120193

Ion Ratio Lower Upper

95 100

174 99.4 80.2 120.2

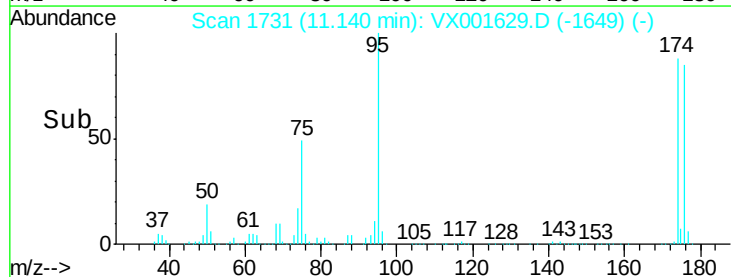
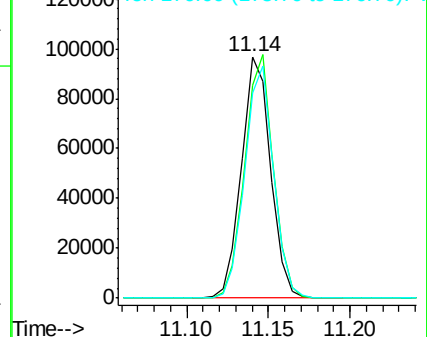
176 95.5 79.2 118.8

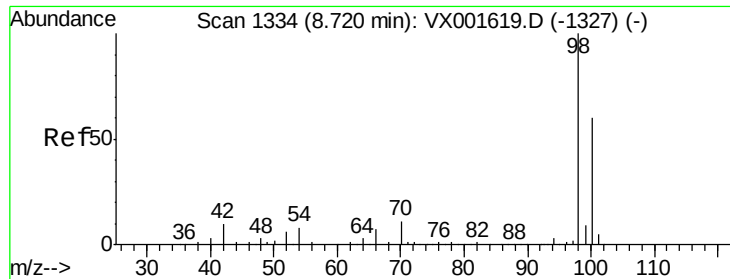


Abundance Ion 95.00 (94.70 to 95.70): VX0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V





#63

Toluene-d8

Concen: 29.04 ug/l

RT: 8.72 min Scan# 1334

Delta R.T. 0.00 min

Lab File: VX001629.D

Acq: 11 May 2018 04:22

Instrument :

MSVOA\_X

ClientSampleId :

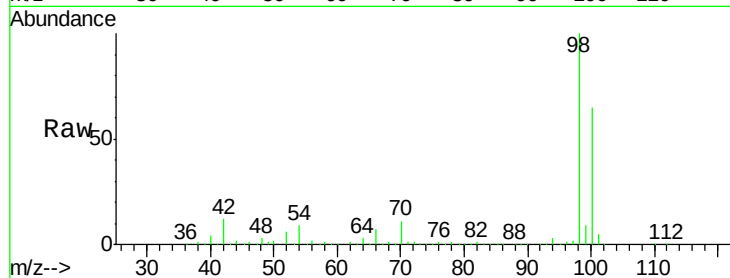
SEWER-OUTFALL-001

Tgt Ion: 98 Resp: 338313

Ion Ratio Lower Upper

98 100

100 66.3 52.2 78.2



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX

250000

200000

150000

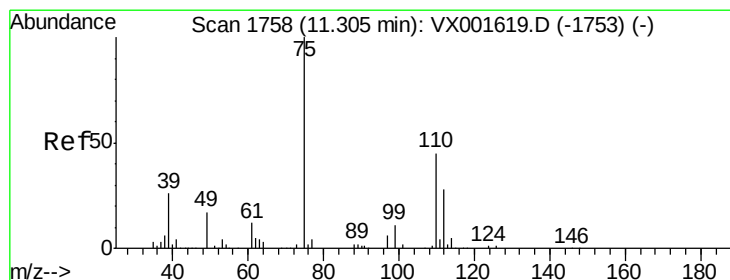
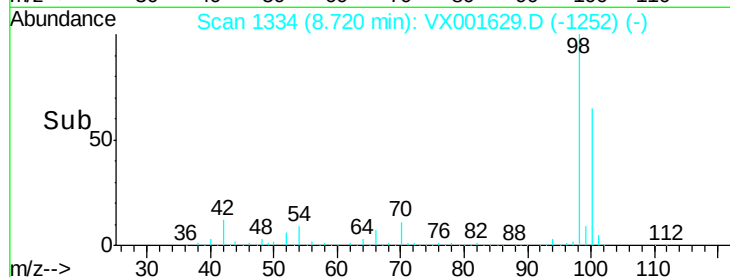
100000

50000

0

8.65 8.70 8.75 8.80

Time-->



#72

1,2,3-Trichloropropane

Concen: 13.60 ug/l

RT: 11.14 min Scan# 1731

Delta R.T. -0.16 min

Lab File: VX001629.D

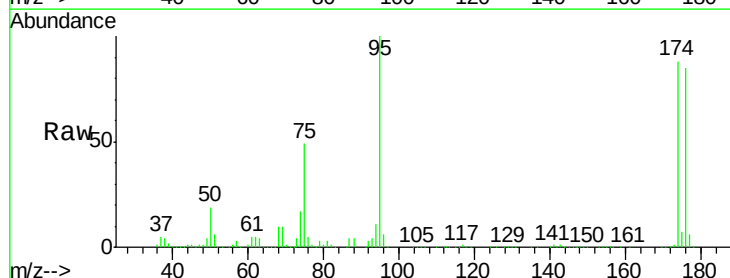
Acq: 11 May 2018 04:22

Tgt Ion: 75 Resp: 58648

Ion Ratio Lower Upper

75 100

77 1.2 0.0 73.2



Abundance Ion 75.00 (74.70 to 75.70): VX0

Ion 77.00 (76.70 to 77.70): VX0

50000

40000

30000

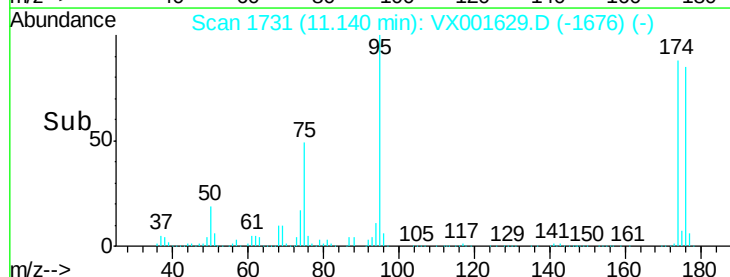
20000

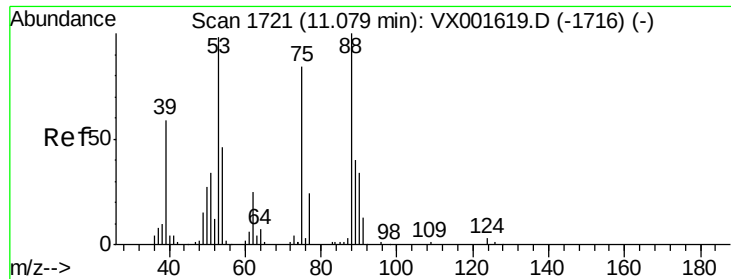
10000

0

11.10 11.15 11.20

Time-->





#77  
t-1,4-Dichloro-2-butene  
Concen: 52.87 ug/l  
RT: 11.14 min Scan# 1731  
Delta R.T. 0.06 min  
Lab File: VX001629.D  
Acq: 11 May 2018 04:22

Instrument :  
MSVOA\_X  
ClientSampleId :  
SEWER-OUTFALL-001

Tgt Ion: 75 Resp: 58648  
Ion Ratio Lower Upper  
75 100  
53 0.1 58.3 174.8#  
89 0.0 23.9 71.8#

