

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX122319\  
 Data File : VX014199.D  
 Acq On : 23 Dec 2019 14:03  
 Operator : JC/SP  
 Sample : K6395-04  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 WC

Quant Time: Dec 24 01:29:29 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 580995   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 887868   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 799997   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 366741   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 6.05   | 65  | 313782   | 47.65 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 95.30%  |      |
| 35) Dibromofluoromethane    | 5.49   | 113 | 263159   | 48.76 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.52%  |      |
| 50) Toluene-d8              | 8.71   | 98  | 1058335  | 50.37 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.74% |      |
| 62) 4-Bromofluorobenzene    | 11.13  | 95  | 363735   | 47.35 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 94.70%  |      |

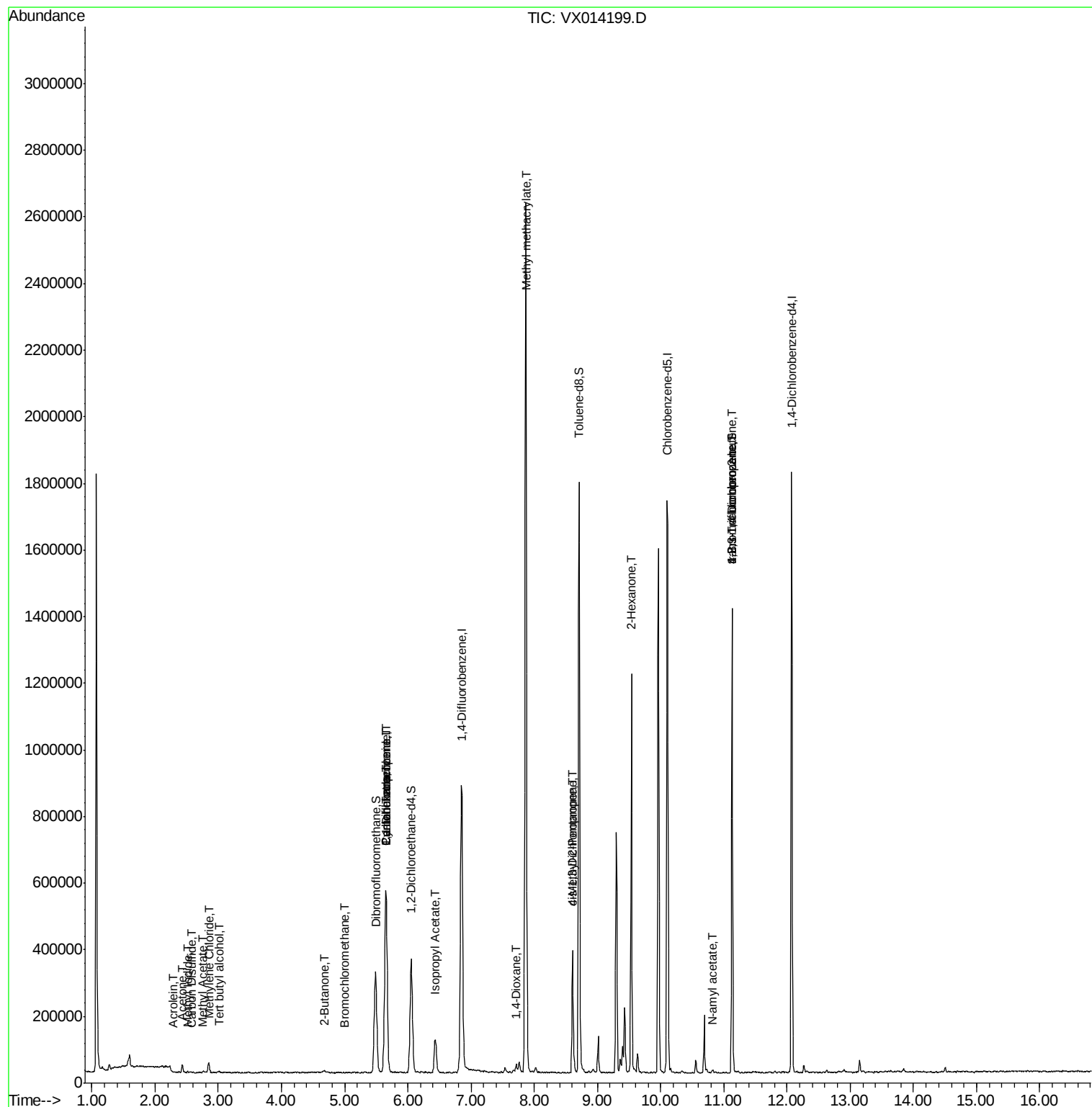
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 10) Methyl Iodide              | 2.51  | 142  | 823      | 2.728  | ug/l # | 46     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 3087     | 2.170  | ug/l # | 45     |
| 13) Acrolein                   | 2.28  | 56   | 212      | 0.260  | ug/l # | 6      |
| 16) Acetone                    | 2.43  | 43   | 26339    | 6.161  | ug/l   | 98     |
| 17) Carbon Disulfide           | 2.57  | 76   | 1547     | 0.848  | ug/l # | 87     |
| 18) Methyl Acetate             | 2.76  | 43   | 6044     | 0.713  | ug/l # | 88     |
| 20) Methylene Chloride         | 2.85  | 84   | 15112    | 2.245  | ug/l   | 89     |
| 25) 2-Butanone                 | 4.69  | 43   | 7836     | 1.487  | ug/l   | 98     |
| 28) Bromochloromethane         | 5.00  | 49   | 843      | 0.650  | ug/l # | 40     |
| 31) Cyclohexane                | 5.65  | 56   | 10731    | 1.091  | ug/l # | 22     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 38393    | 4.713  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 50012    | 6.739  | ug/l # | 16     |
| 43) Isopropyl Acetate          | 6.43  | 43   | 139103   | 9.343  | ug/l   | 98     |
| 48) Methyl methacrylate        | 7.87  | 41   | 216257   | 29.663 | ug/l # | 42     |
| 49) 1,4-Dioxane                | 7.72  | 88   | 200      | 1.348  | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.61  | 43   | 132113   | 14.130 | ug/l # | 50     |
| 54) cis-1,3-Dichloropropene    | 8.61  | 75   | 59601    | 6.099  | ug/l # | 60     |
| 59) 2-Hexanone                 | 9.54  | 43   | 138288   | 18.373 | ug/l # | 50     |
| 74) N-amyl acetate             | 10.82 | 43   | 5939     | 0.491  | ug/l # | 55     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 177024   | 22.234 | ug/l # | 38     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 176718   | 62.647 | ug/l # | 12     |

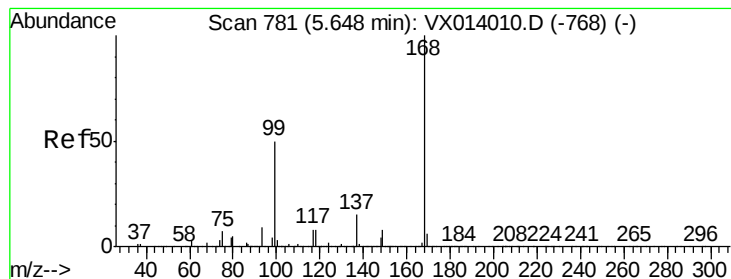
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX122319\  
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Instrument :  
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Quant Time: Dec 24 01:29:29 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 17 03:01:07 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.01 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampleId :

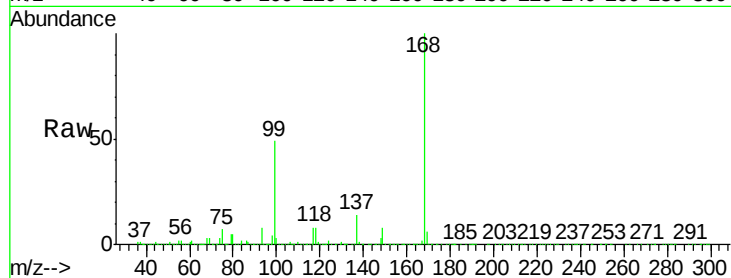
WC

Tgt Ion:168 Resp: 580995

Ion Ratio Lower Upper

168 100

99 49.3 40.3 60.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

200000

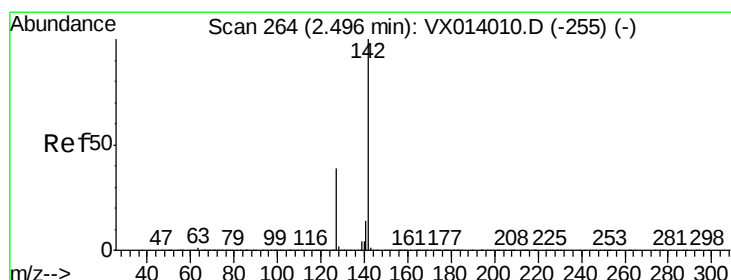
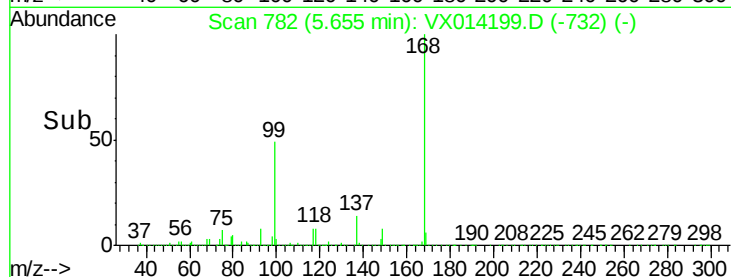
150000

100000

50000

0

Time-->



#10

Methyl Iodide

Concen: 2.728 ug/l

RT: 2.51 min Scan# 266

Delta R.T. 0.01 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

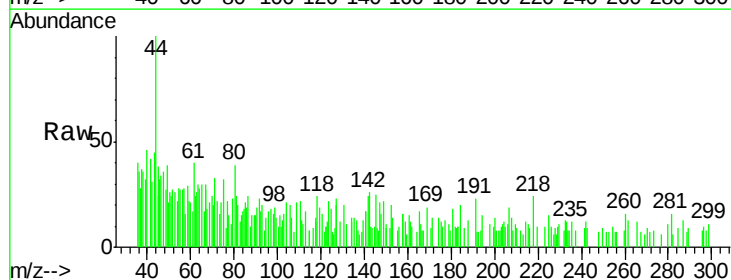
Tgt Ion:142 Resp: 823

Ion Ratio Lower Upper

142 100

127 83.2 31.6 47.4#

141 11.8 11.6 17.4



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

2.51

600

500

400

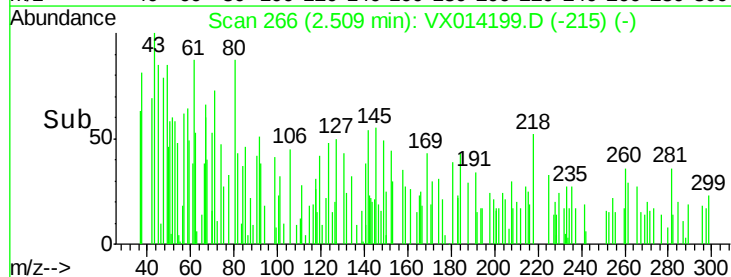
300

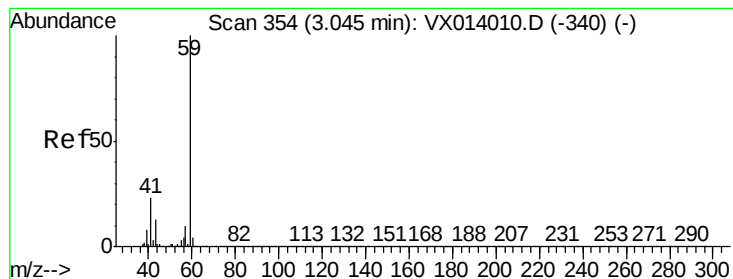
200

100

0

Time-->



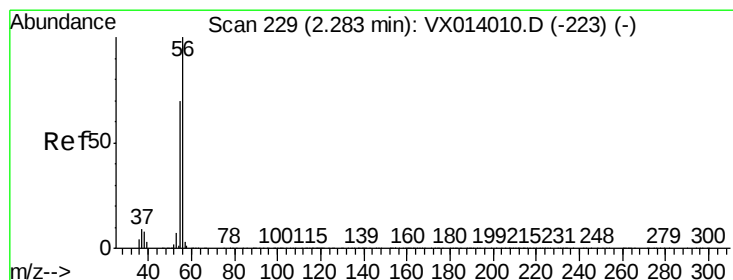
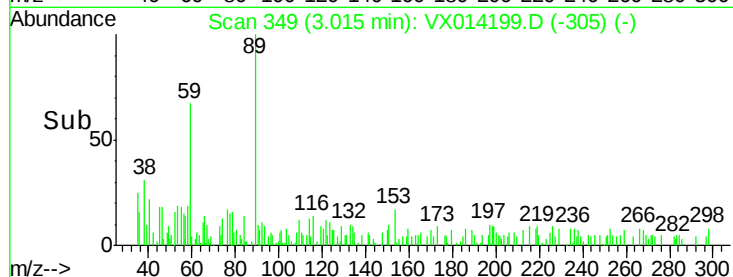
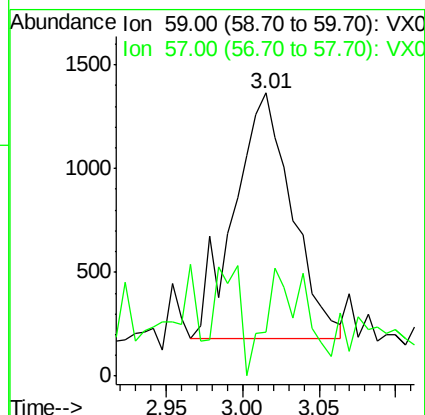
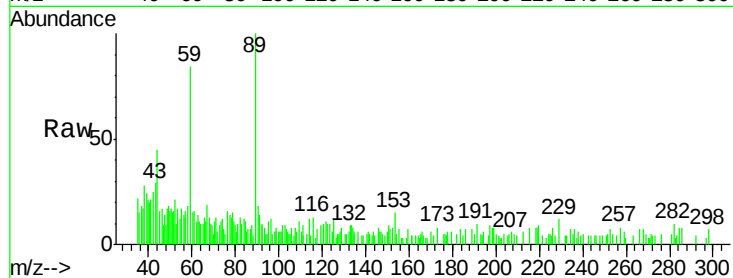


#11

Tert butyl alcohol  
 Concen: 2.170 ug/l  
 RT: 3.01 min Scan# 349  
 Delta R.T. -0.03 min  
 Lab File: VX014199.D  
 Acq: 23 Dec 2019 14:03

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 WC

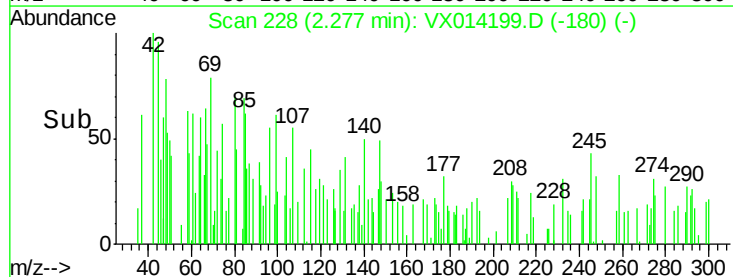
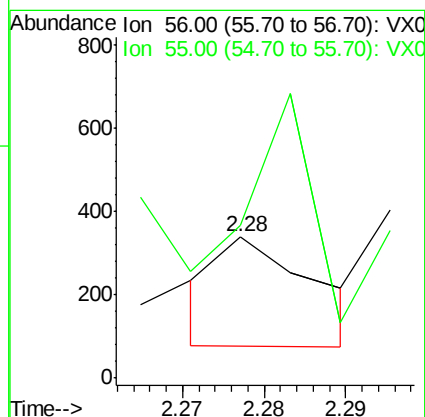
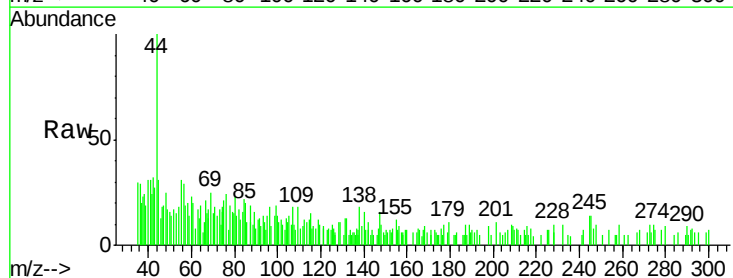
Tgt Ion: 59 Resp: 3087  
 Ion Ratio Lower Upper  
 59 100  
 57 31.3 8.4 12.6#

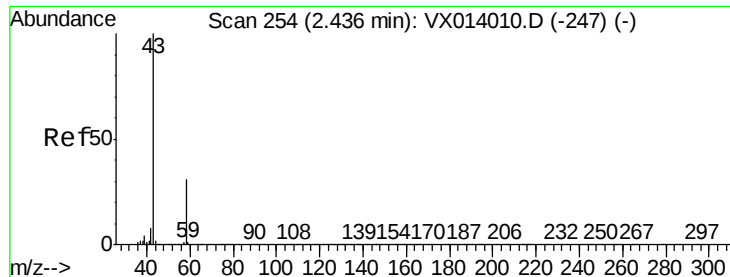


#13

Acrolein  
 Concen: 0.260 ug/l  
 RT: 2.28 min Scan# 228  
 Delta R.T. -0.01 min  
 Lab File: VX014199.D  
 Acq: 23 Dec 2019 14:03

Tgt Ion: 56 Resp: 212  
 Ion Ratio Lower Upper  
 56 100  
 55 148.6 56.9 85.3#





#16

Acetone

Concen: 6.161 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.01 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampleId :

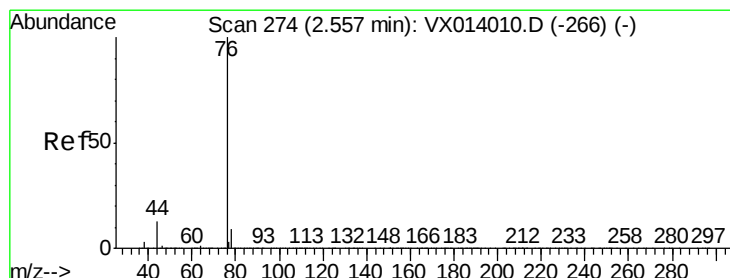
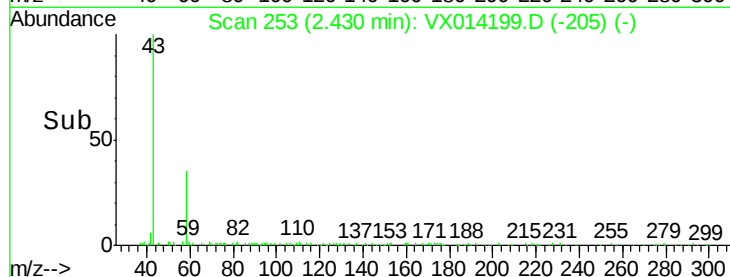
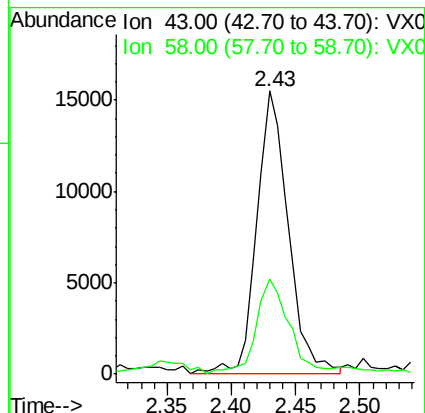
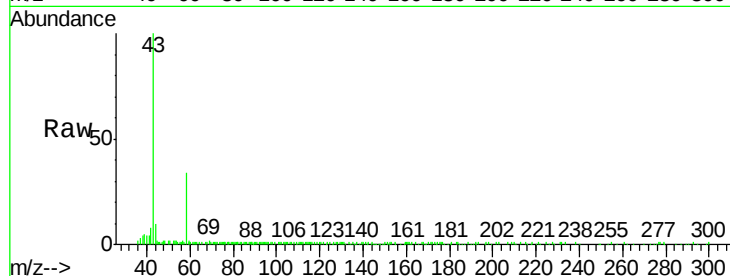
WC

Tgt Ion: 43 Resp: 26339

Ion Ratio Lower Upper

43 100

58 32.0 24.9 37.3



#17

Carbon Disulfide

Concen: 0.848 ug/l

RT: 2.57 min Scan# 276

Delta R.T. 0.01 min

Lab File: VX014199.D

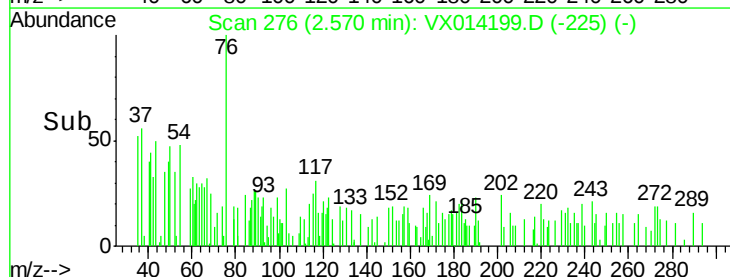
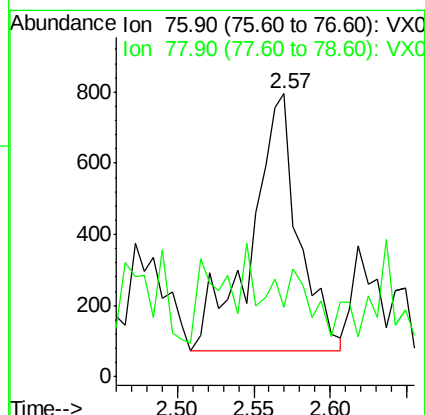
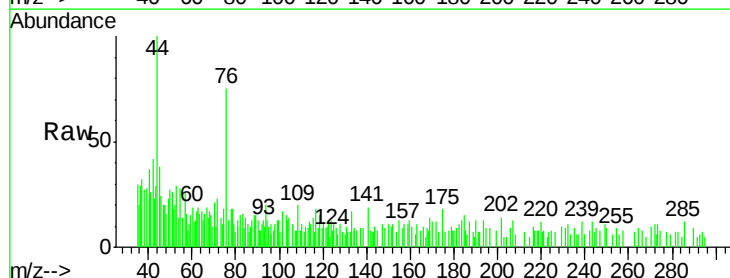
Acq: 23 Dec 2019 14:03

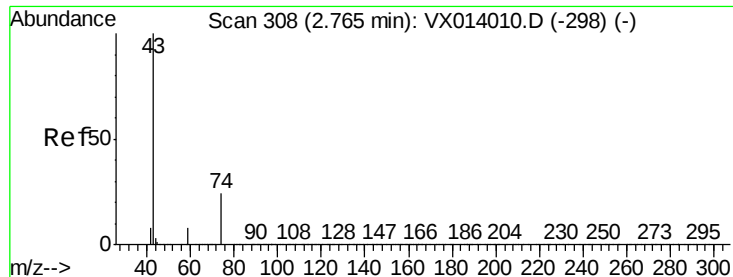
Tgt Ion: 76 Resp: 1547

Ion Ratio Lower Upper

76 100

78 13.7 7.2 10.8#

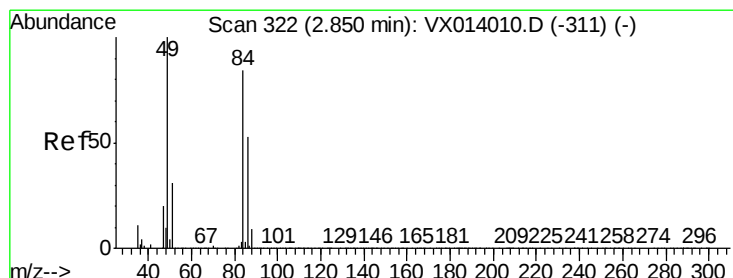
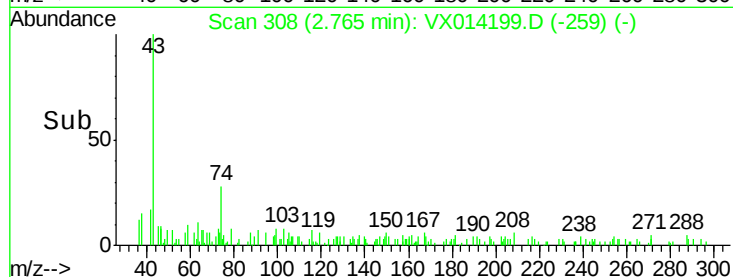
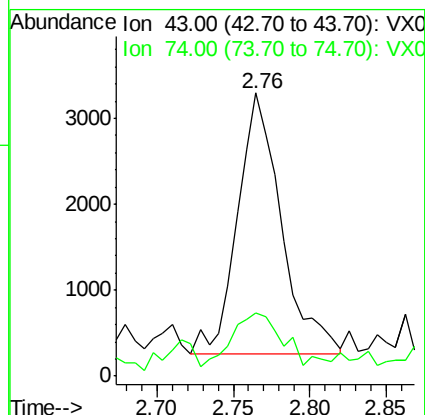
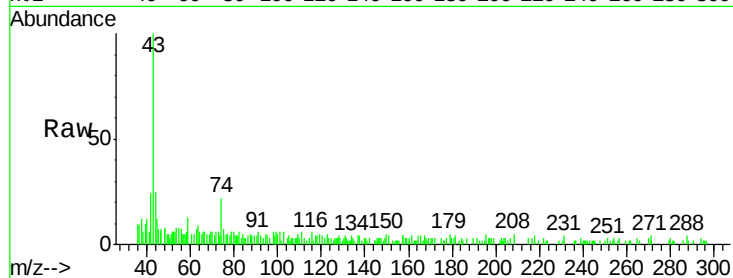




#18  
Methyl Acetate  
Concen: 0.713 ug/l  
RT: 2.76 min Scan# 308  
Delta R.T. 0.00 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

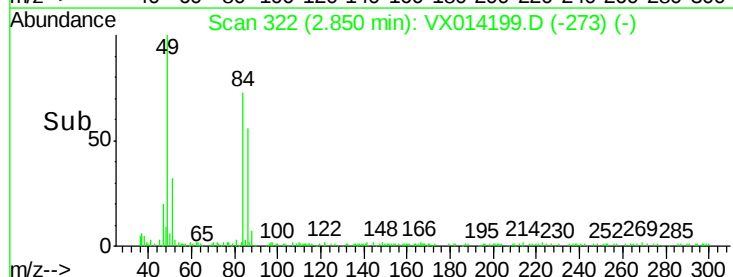
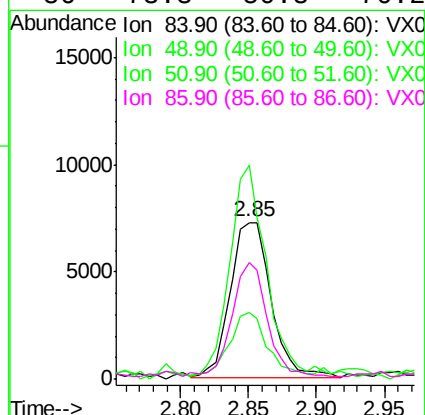
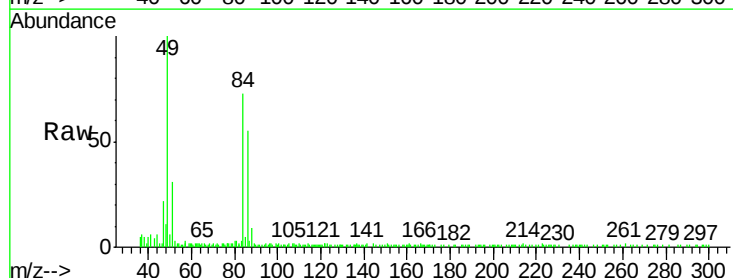
Instrument :  
MSVOA\_X  
ClientSampleId :  
WC

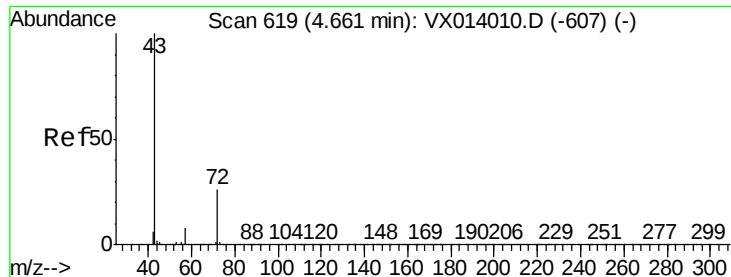
Tgt Ion: 43 Resp: 6044  
Ion Ratio Lower Upper  
43 100  
74 18.7 19.5 29.3#



#20  
Methylene Chloride  
Concen: 2.245 ug/l  
RT: 2.85 min Scan# 322  
Delta R.T. 0.00 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

Tgt Ion: 84 Resp: 15112  
Ion Ratio Lower Upper  
84 100  
49 135.0 95.8 143.6  
51 38.0 29.8 44.8  
86 73.3 50.8 76.2





#25

2-Butanone

Concen: 1.487 ug/l

RT: 4.69 min Scan# 623

Delta R.T. 0.02 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampled :

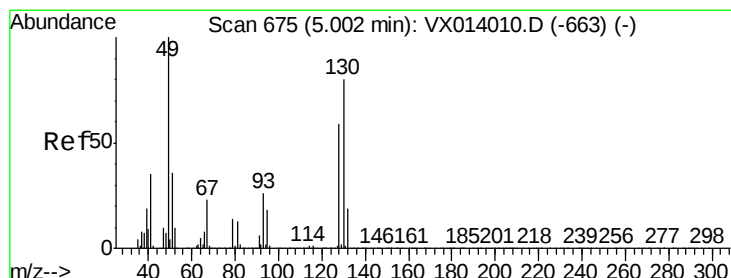
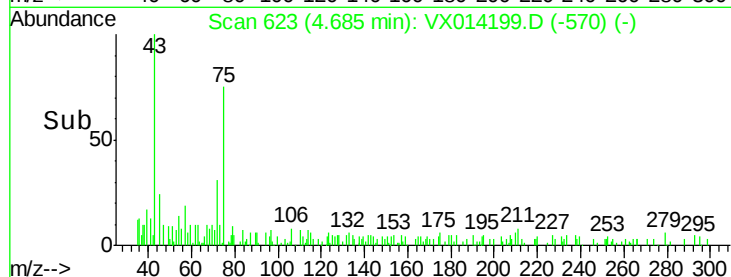
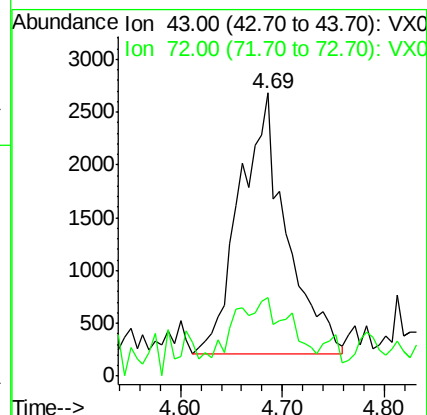
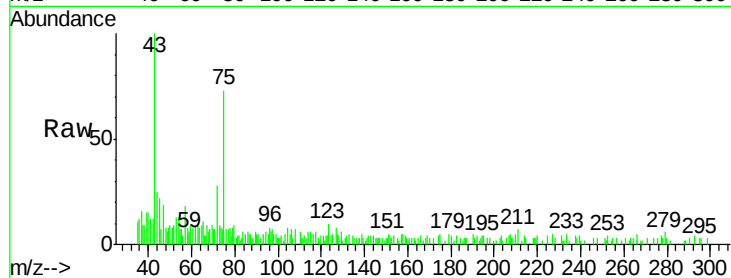
WC

Tgt Ion: 43 Resp: 7836

Ion Ratio Lower Upper

43 100

72 25.0 21.0 31.4



#28

Bromochloromethane

Concen: 0.650 ug/l

RT: 5.00 min Scan# 675

Delta R.T. 0.00 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

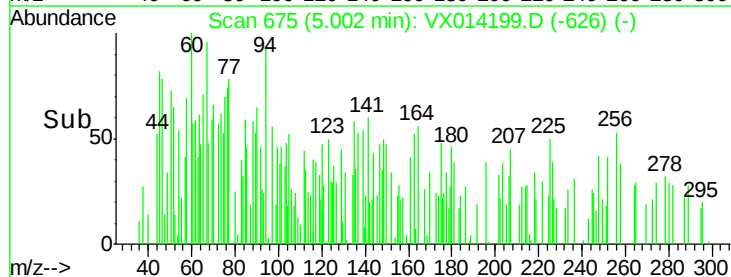
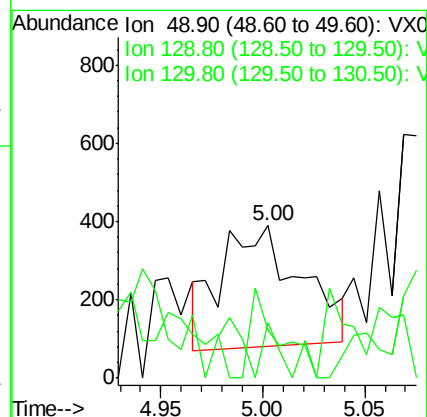
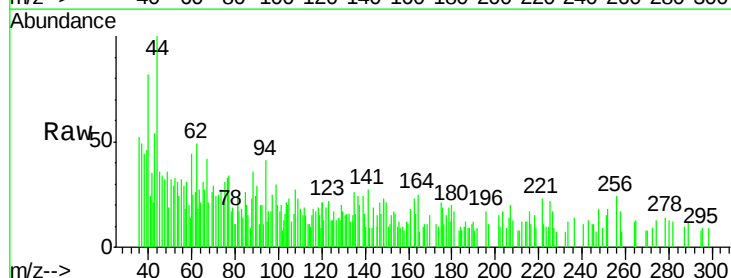
Tgt Ion: 49 Resp: 843

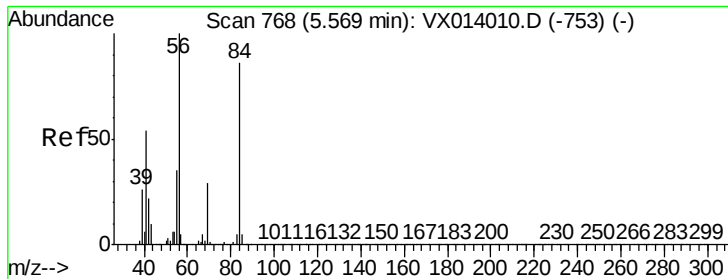
Ion Ratio Lower Upper

49 100

129 9.0 0.0 5.0#

130 26.3 64.6 97.0#

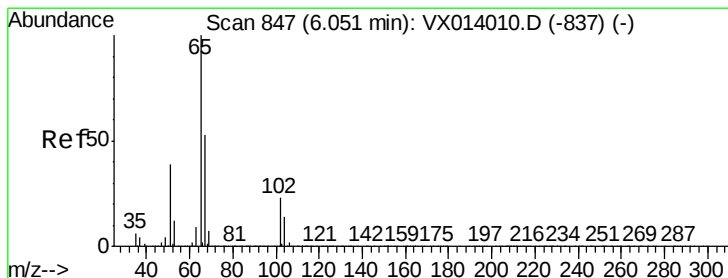
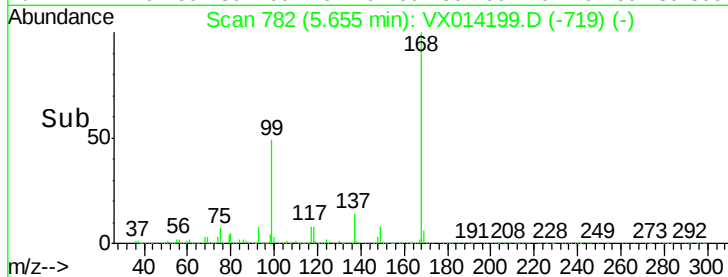
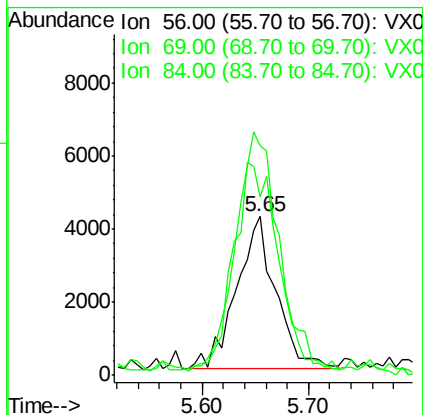
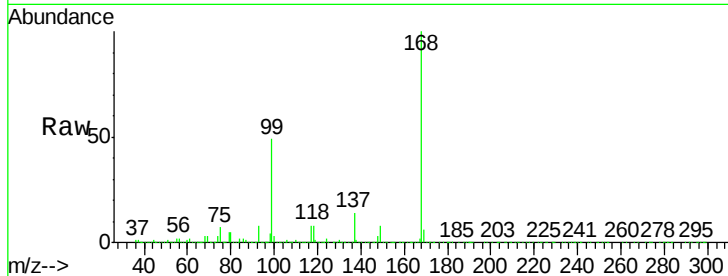




#31  
Cyclohexane  
Concen: 1.091 ug/l  
RT: 5.65 min Scan# 782  
Delta R.T. 0.09 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

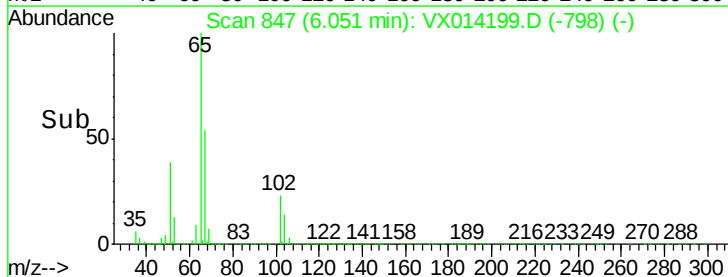
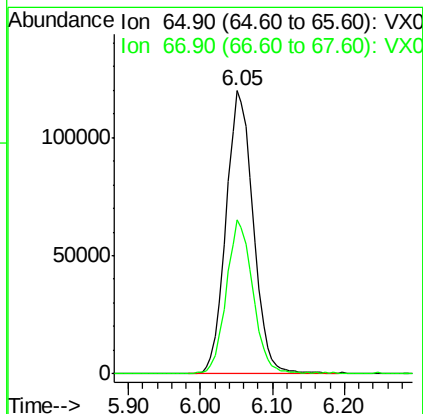
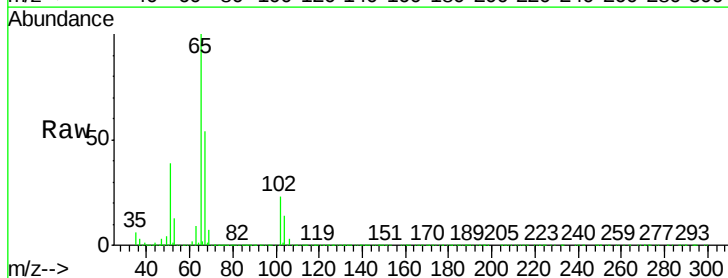
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MSVOA\_X  
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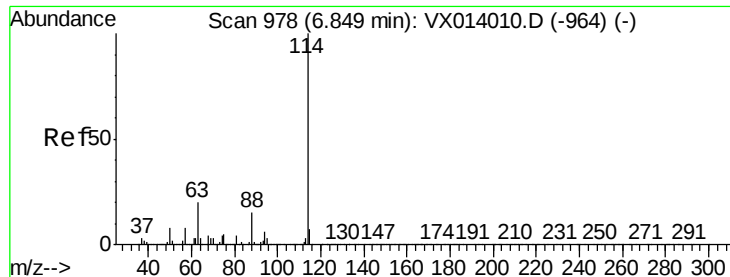
Tgt Ion: 56 Resp: 10731  
Ion Ratio Lower Upper  
56 100  
69 148.3 23.2 34.8#  
84 113.9 69.2 103.8#



#33  
1,2-Dichloroethane-d4  
Concen: 47.653 ug/l  
RT: 6.05 min Scan# 847  
Delta R.T. 0.00 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

Tgt Ion: 65 Resp: 313782  
Ion Ratio Lower Upper  
65 100  
67 53.0 0.0 106.4





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampleId :

WC

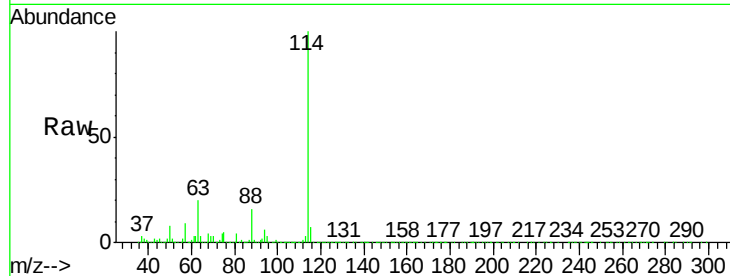
Tgt Ion:114 Resp: 887868

Ion Ratio Lower Upper

114 100

63 20.2 0.0 40.8

88 15.7 0.0 30.4



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

500000

400000

300000

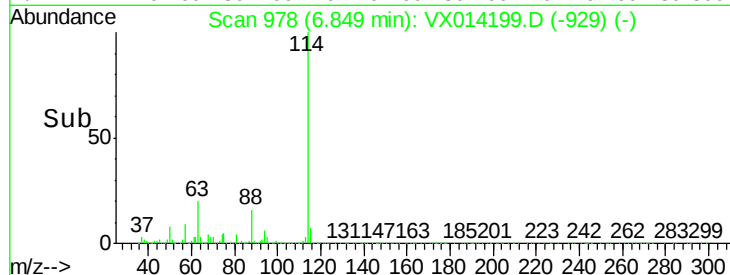
200000

100000

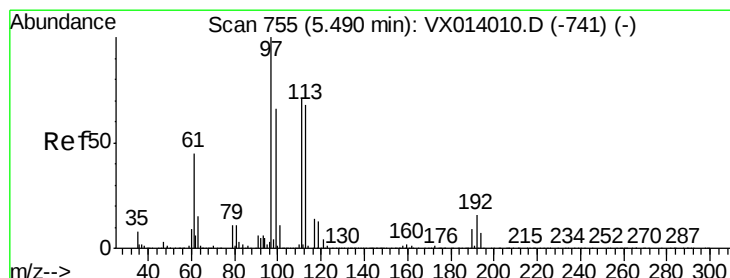
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6.85

6.70 6.80 6.90 7.00



Time-->



#35

Dibromofluoromethane

Concen: 48.758 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

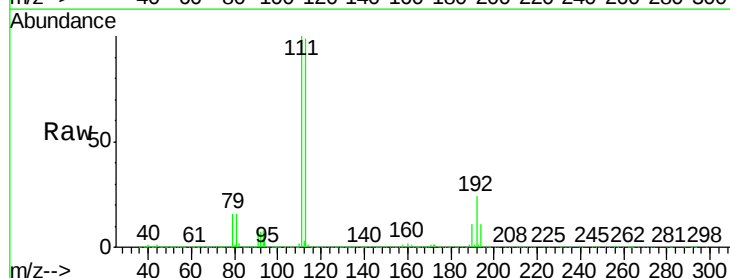
Tgt Ion:113 Resp: 263159

Ion Ratio Lower Upper

113 100

111 102.2 82.0 123.0

192 23.4 19.3 28.9



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

120000

100000

80000

60000

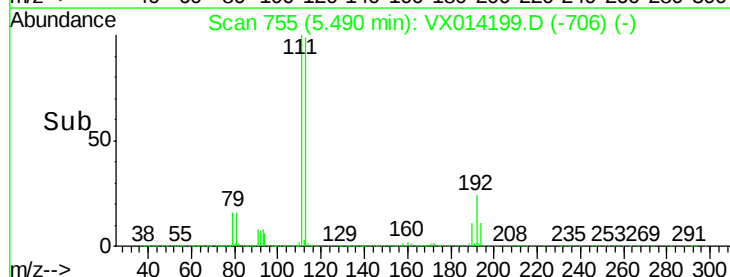
40000

20000

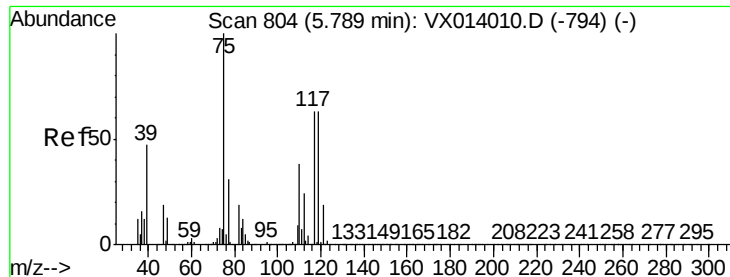
0

5.49

5.40 5.50 5.60



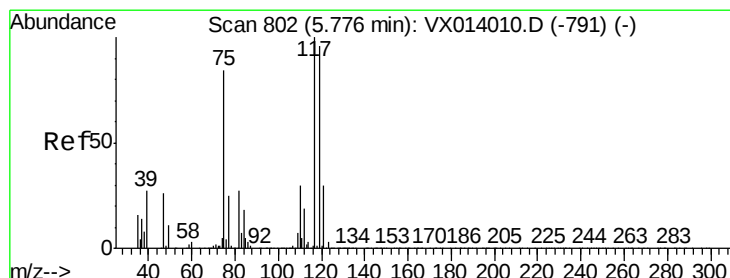
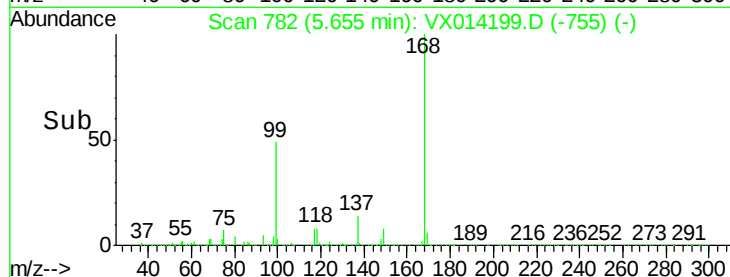
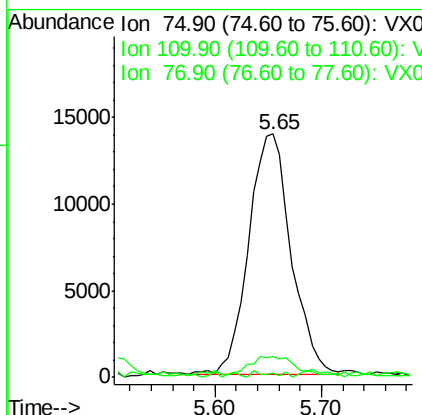
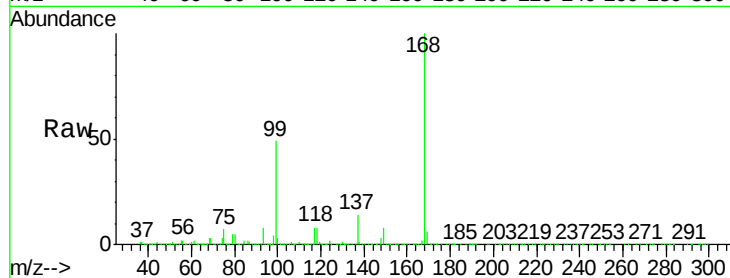
Time-->



#36  
 1,1-Dichloropropene  
 Concen: 4.713 ug/l  
 RT: 5.65 min Scan# 782  
 Delta R.T. -0.13 min  
 Lab File: VX014199.D  
 Acq: 23 Dec 2019 14:03

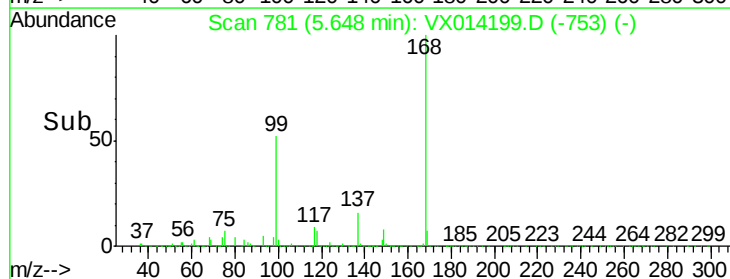
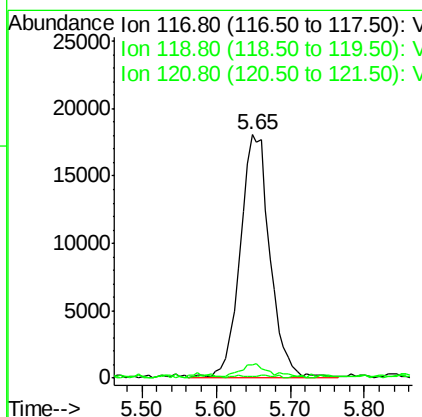
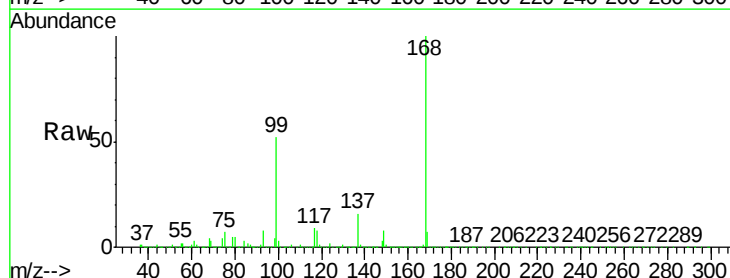
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 WC

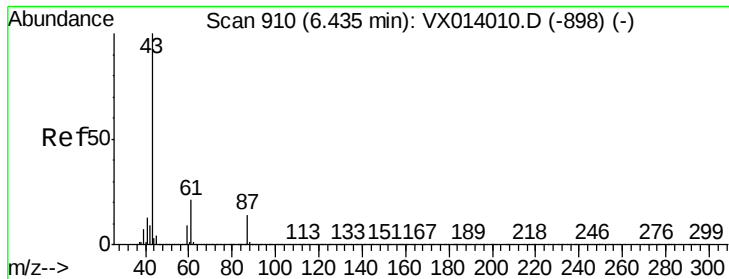
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 10.3  | 18.3  | 54.9# |
| 77      | 0.7   | 24.8  | 37.2# |



#38  
 Carbon Tetrachloride  
 Concen: 6.739 ug/l  
 RT: 5.65 min Scan# 781  
 Delta R.T. -0.13 min  
 Lab File: VX014199.D  
 Acq: 23 Dec 2019 14:03

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 5.1   | 76.2  | 114.4# |
| 121     | 0.1   | 23.6  | 35.4#  |





#43

Isopropyl Acetate

Concen: 9.343 ug/l

RT: 6.43 min Scan# 910

Delta R.T. 0.00 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

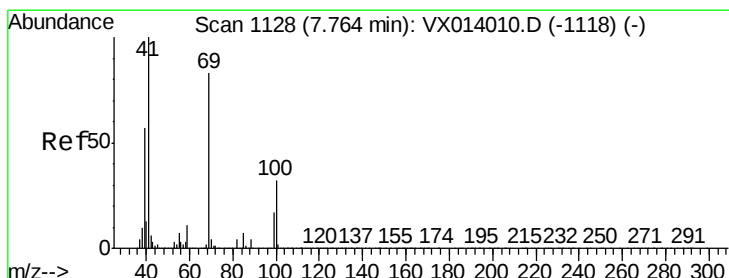
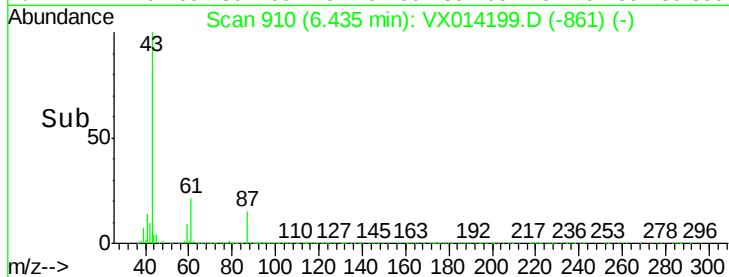
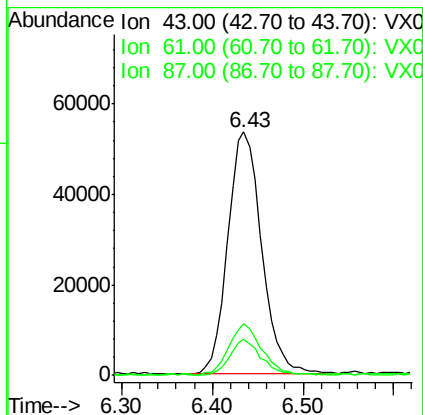
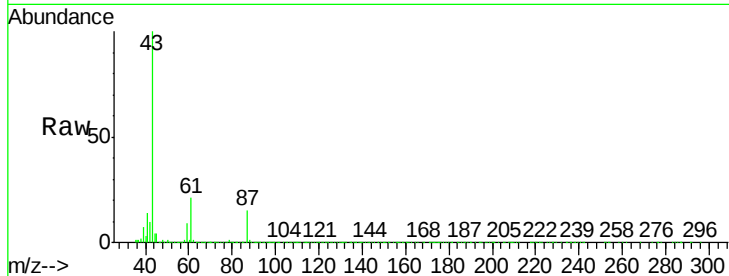
Instrument :

MSVOA\_X

ClientSampleId :

WC

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 139103 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 61       | 19.6  | 16.4  | 24.6   |
| 87       | 13.8  | 10.7  | 16.1   |



#48

Methyl methacrylate

Concen: 29.663 ug/l

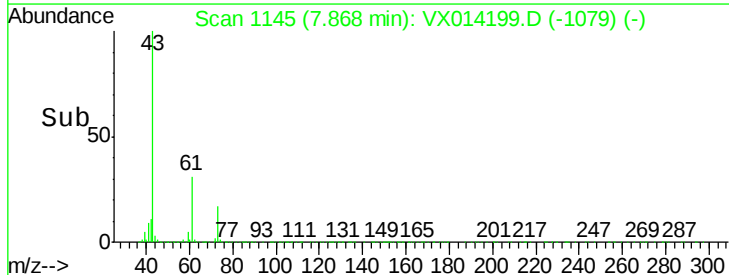
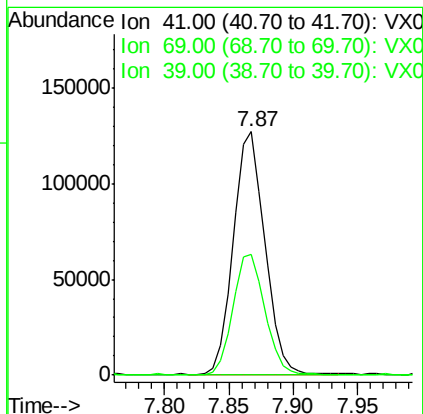
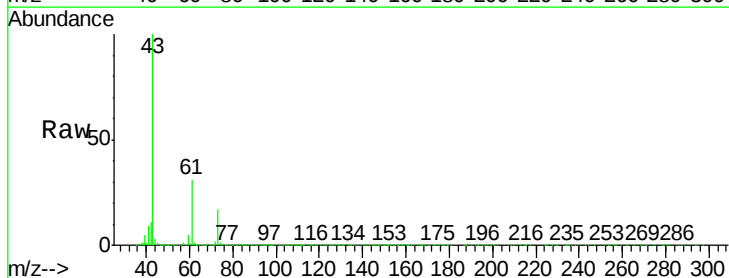
RT: 7.87 min Scan# 1145

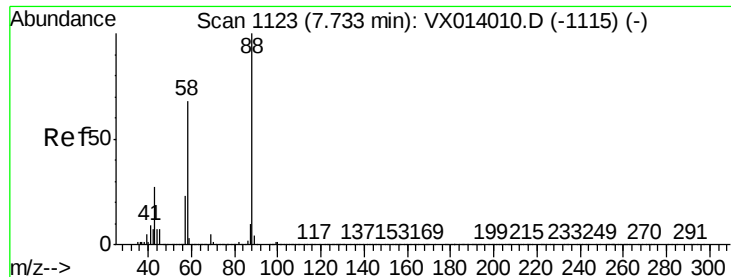
Delta R.T. 0.10 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 41    | Resp: | 216257 |
| Ion      | Ratio | Lower | Upper  |
| 41       | 100   |       |        |
| 69       | 0.1   | 65.8  | 98.6#  |
| 39       | 50.1  | 44.6  | 67.0   |





#49

1,4-Dioxane

Concen: 1.348 ug/l

RT: 7.72 min Scan# 1120

Delta R.T. -0.02 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampleId :

WC

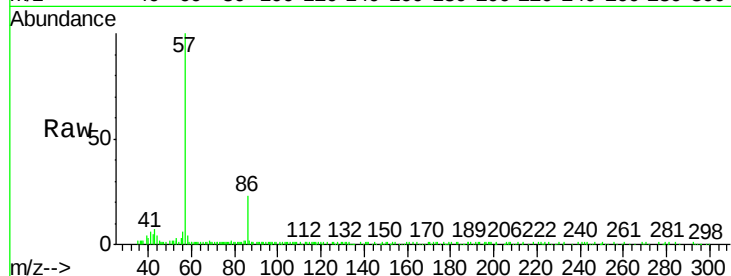
Tgt Ion: 88 Resp: 200

Ion Ratio Lower Upper

88 100

43 0.0 26.5 39.7#

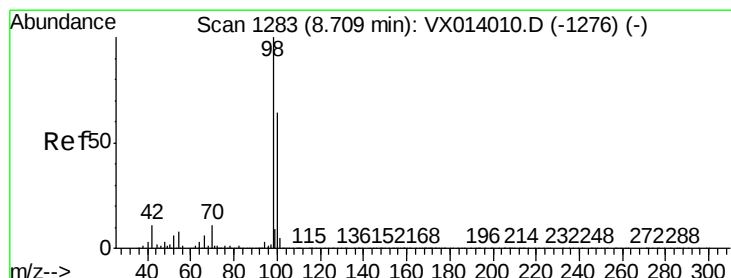
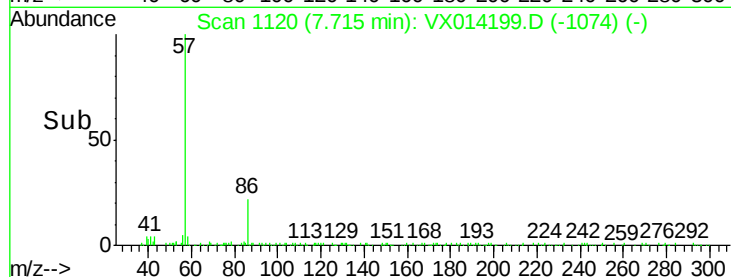
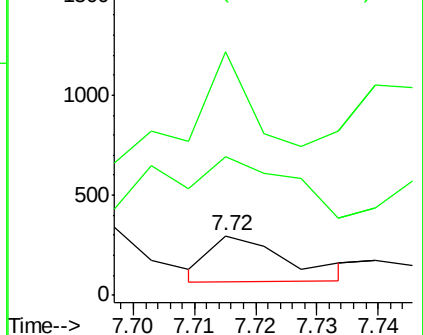
58 633.5 56.8 85.2#



Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#50

Toluene-d8

Concen: 50.366 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX014199.D

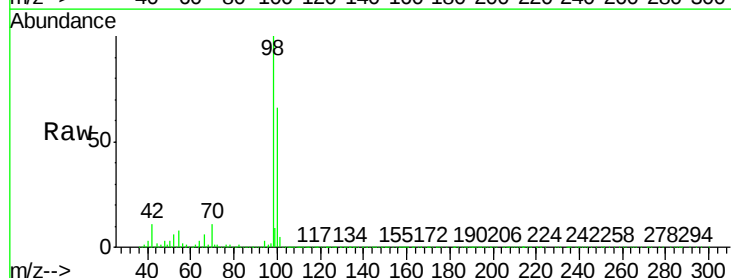
Acq: 23 Dec 2019 14:03

Tgt Ion: 98 Resp: 1058335

Ion Ratio Lower Upper

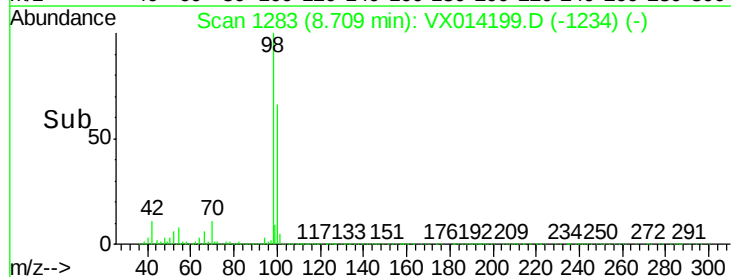
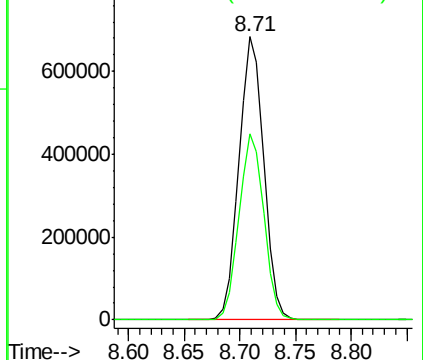
98 100

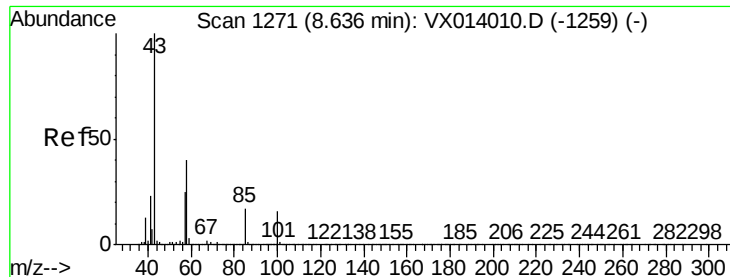
100 65.7 52.9 79.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0





#51

4-Methyl-2-Pentanone

Concen: 14.130 ug/l

RT: 8.61 min Scan# 1266

Delta R.T. -0.03 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampleId :

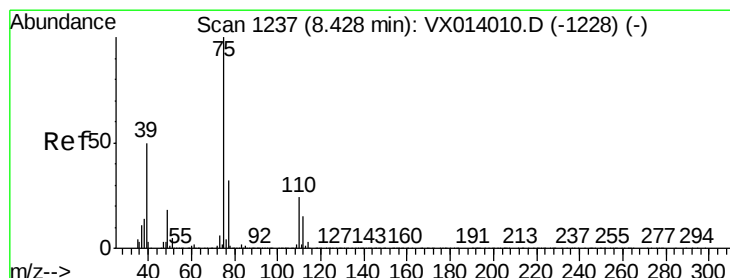
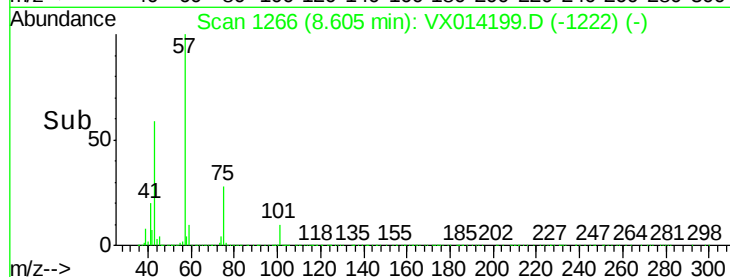
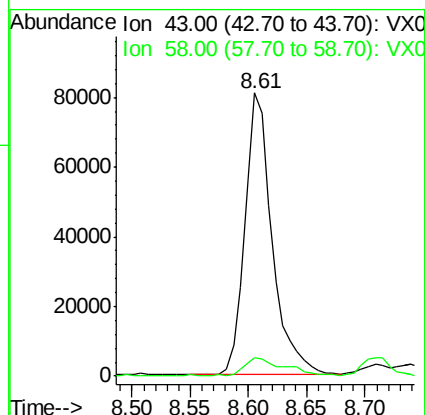
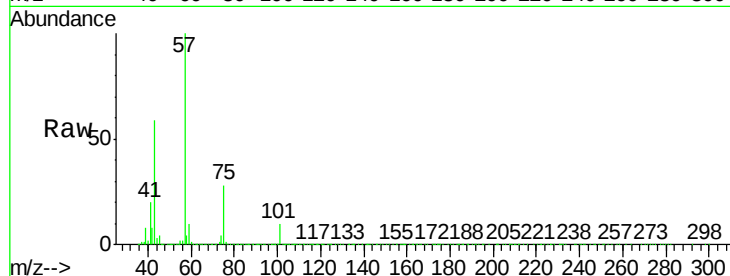
WC

Tgt Ion: 43 Resp: 132113

Ion Ratio Lower Upper

43 100

58 9.1 32.2 48.2#



#54

cis-1,3-Dichloropropene

Concen: 6.099 ug/l

RT: 8.61 min Scan# 1266

Delta R.T. 0.18 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

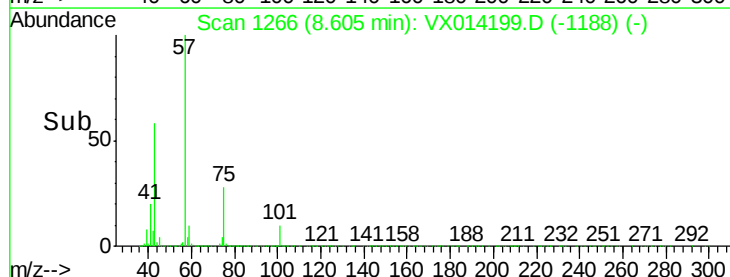
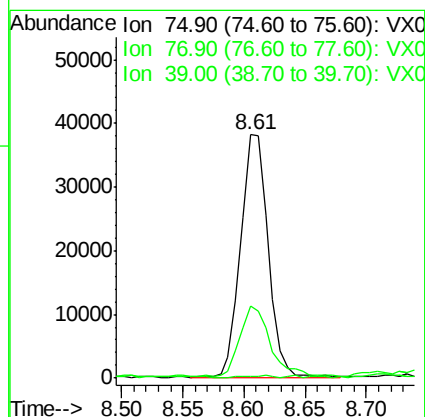
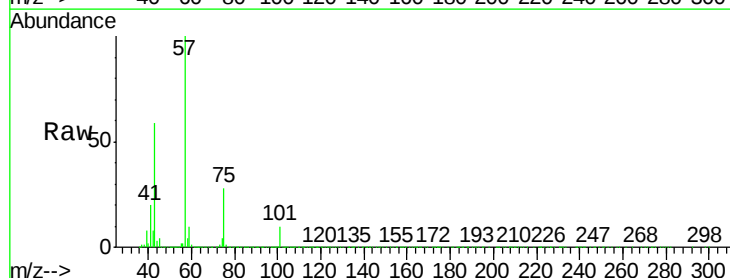
Tgt Ion: 75 Resp: 59601

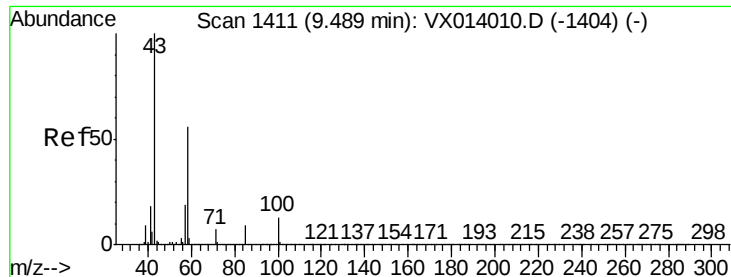
Ion Ratio Lower Upper

75 100

77 0.5 25.3 37.9#

39 28.9 39.9 59.9#

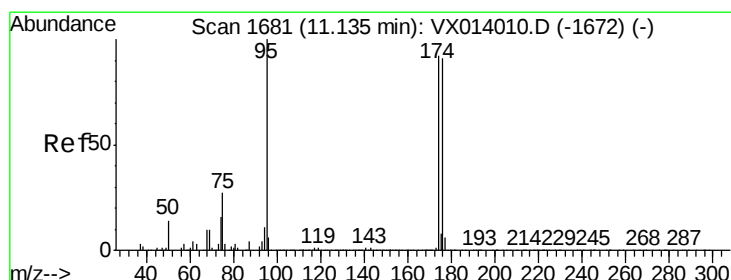
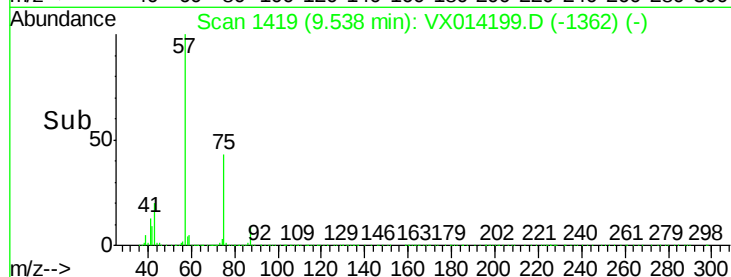
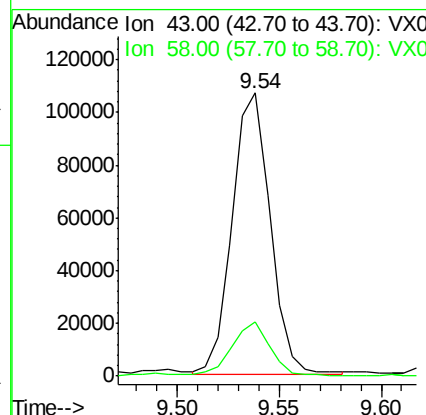
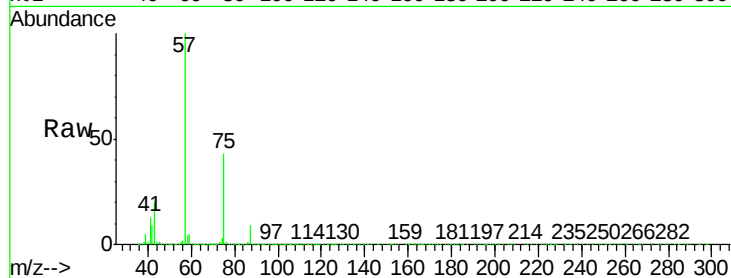




#59  
2-Hexanone  
Concen: 18.373 ug/l  
RT: 9.54 min Scan# 1419  
Delta R.T. 0.05 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

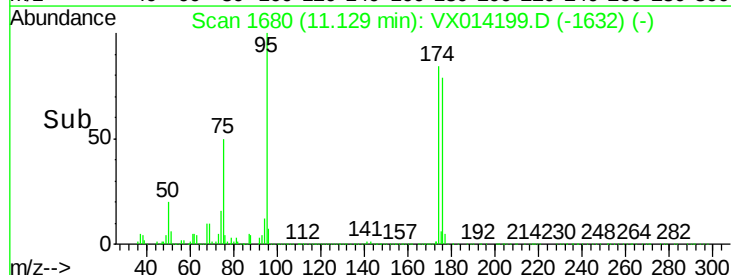
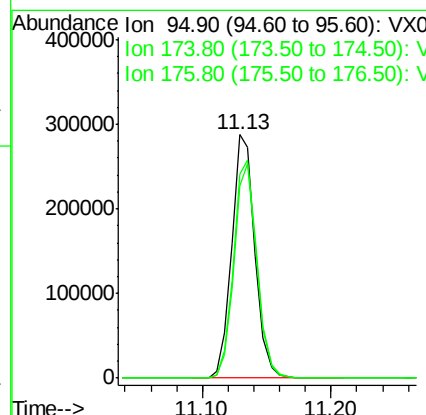
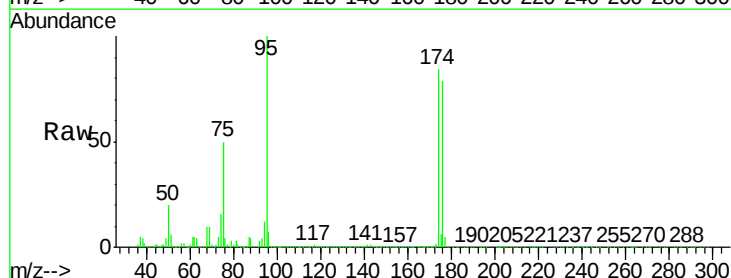
Instrument :  
MSVOA\_X  
ClientSampleId :  
WC

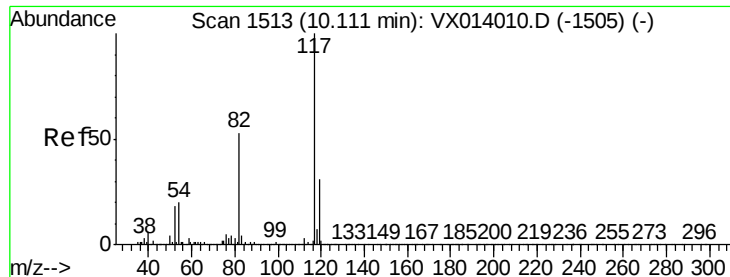
Tgt Ion: 43 Resp: 138288  
Ion Ratio Lower Upper  
43 100  
58 19.5 28.0 84.0#



#62  
4-Bromofluorobenzene  
Concen: 47.354 ug/l  
RT: 11.13 min Scan# 1680  
Delta R.T. -0.01 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

Tgt Ion: 95 Resp: 363735  
Ion Ratio Lower Upper  
95 100  
174 90.4 0.0 175.8  
176 86.6 0.0 173.0

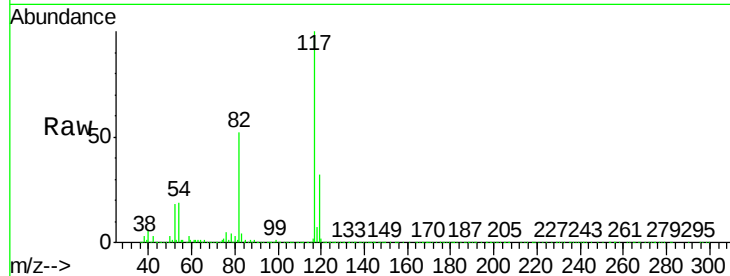




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

Instrument :  
MSVOA\_X  
ClientSampleId :  
WC

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 117     | 100   |       |       |
| 82      | 52.1  | 42.2  | 63.4  |
| 119     | 31.7  | 25.1  | 37.7  |

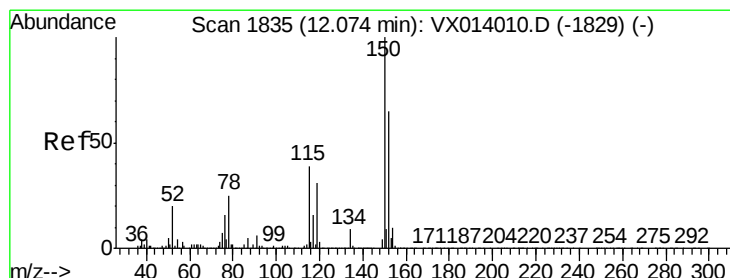
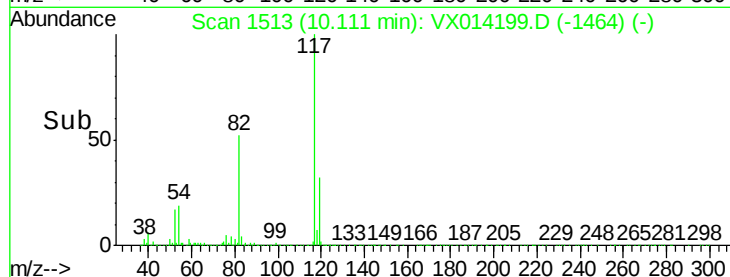
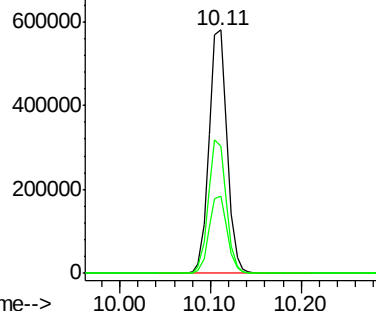


Abundance

Ion 116.90 (116.60 to 117.60): V

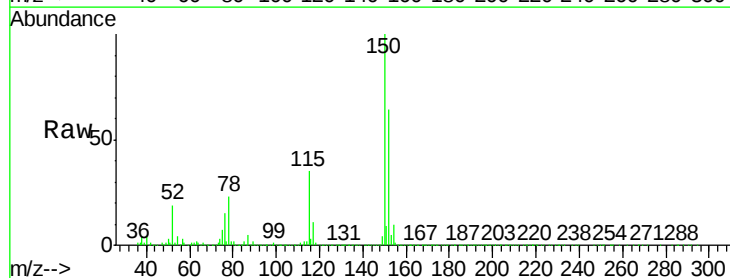
Ion 82.00 (81.70 to 82.70): V

Ion 118.90 (118.60 to 119.60): V



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. 0.00 min  
Lab File: VX014199.D  
Acq: 23 Dec 2019 14:03

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 55.7  | 38.3  | 114.9 |
| 150     | 157.2 | 0.0   | 345.4 |

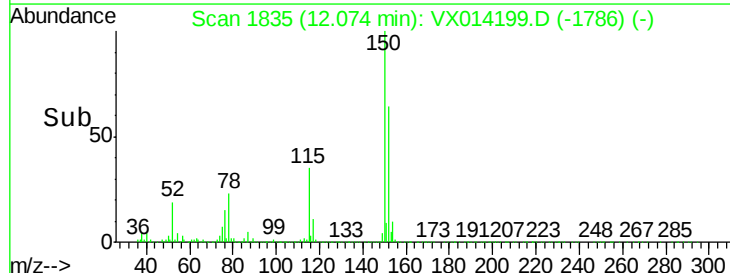
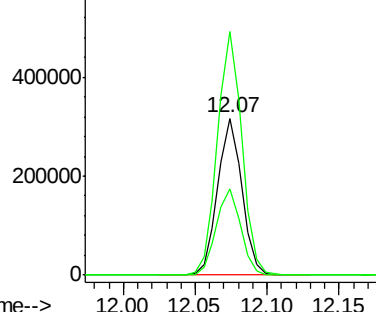


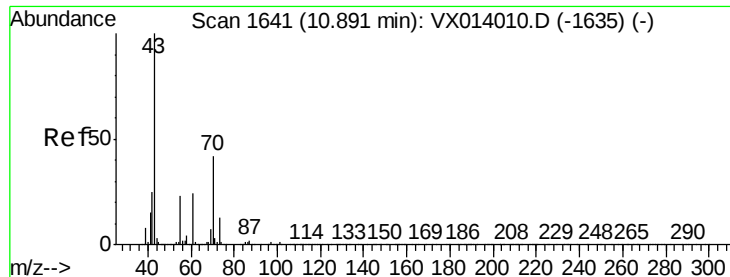
Abundance

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





#74

N-amyI acetate

Concen: 0.491 ug/l

RT: 10.82 min Scan# 1630

Delta R.T. -0.07 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampleId :

WC

Tgt Ion: 43 Resp: 5939

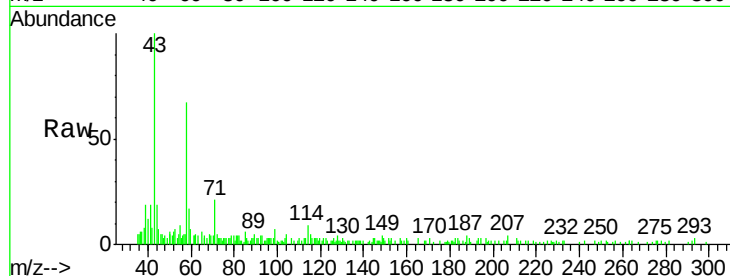
Ion Ratio Lower Upper

43 100

70 5.4 34.4 51.6#

55 16.4 19.1 28.7#

61 0.0 19.7 29.5#

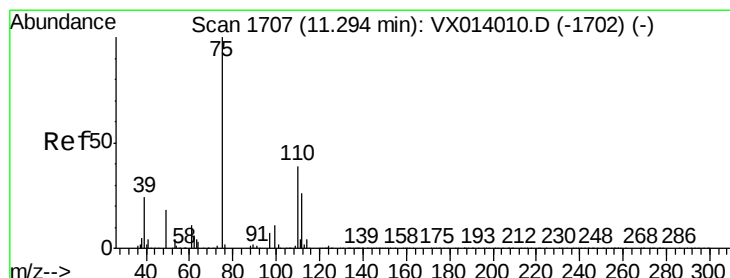
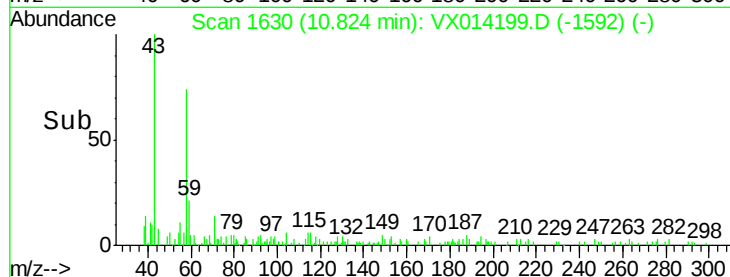
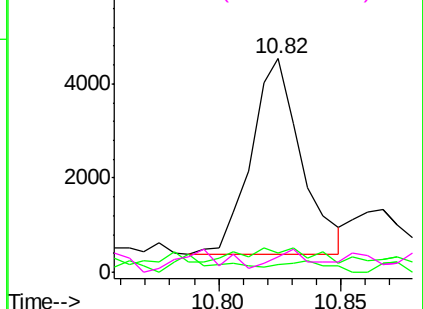


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0



#76

1,2,3-Trichloropropane

Concen: 22.234 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX014199.D

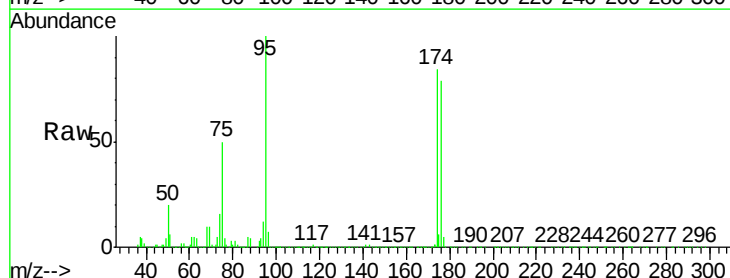
Acq: 23 Dec 2019 14:03

Tgt Ion: 75 Resp: 177024

Ion Ratio Lower Upper

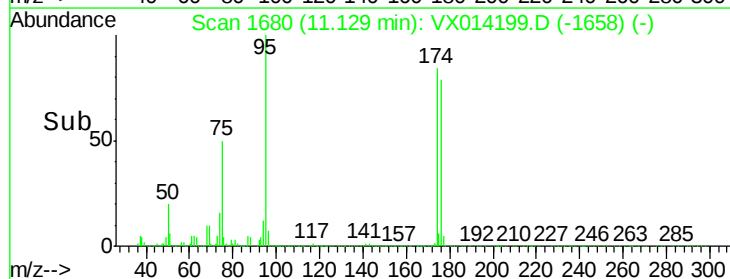
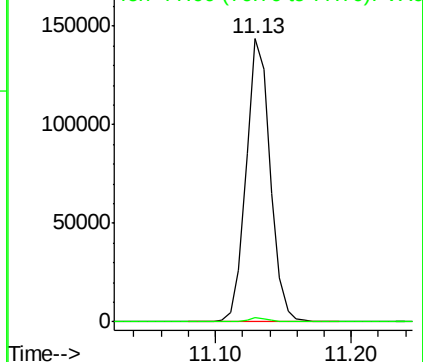
75 100

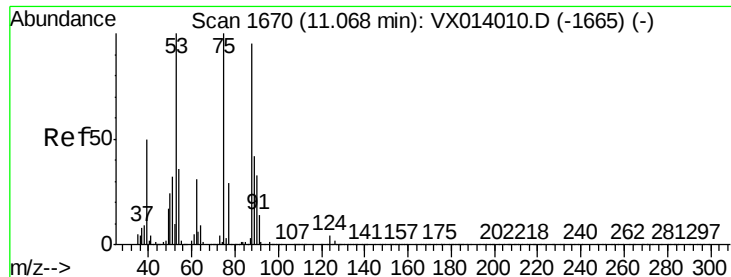
77 1.2 19.3 57.8#



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: 62.647 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX014199.D

Acq: 23 Dec 2019 14:03

Instrument :

MSVOA\_X

ClientSampleId :

WC

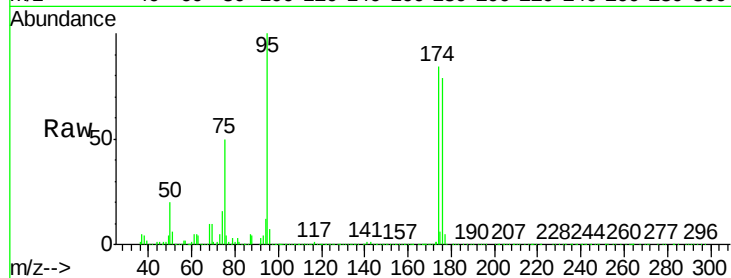
Tgt Ion: 75 Resp: 176718

Ion Ratio Lower Upper

75 100

53 0.3 76.7 115.1#

89 0.0 34.6 51.8#



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

