

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX092619\  
 Data File : VX012668.D  
 Acq On : 26 Sep 2019 12:49  
 Operator : JC/SP  
 Sample : K5049-09  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TRIP-BLANK

Quant Time: Sep 26 23:32:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092319W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Sep 23 12:27:01 2019  
 Response via : Initial Calibration

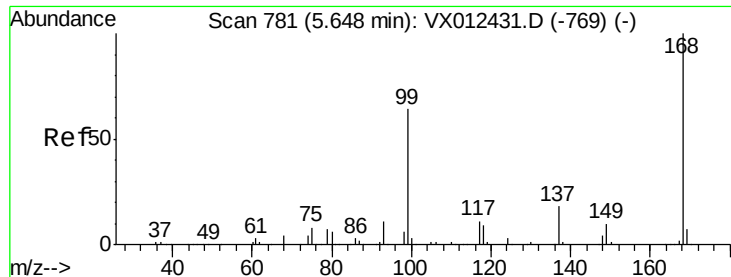
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 132000   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 268273   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 237269   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 97299    | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 135910   | 70.71 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 141.42% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 92237    | 57.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 115.46% |          |
| 50) Toluene-d8              | 8.71  | 98   | 327230   | 53.18 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.36% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 126815   | 52.42 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.84% |          |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 5) Bromomethane                | 1.64  | 94   | 563      | 0.845  | ug/l   | 82     |
| 10) Methyl Iodide              | 2.51  | 142  | 266      | 5.110  | ug/l # | 62     |
| 11) Tert butyl alcohol         | 3.00  | 59   | 8084     | 16.836 | ug/l # | 76     |
| 13) Acrolein                   | 2.27  | 56   | 103      | 10.602 | ug/l # | 15     |
| 15) Acrylonitrile              | 3.15  | 53   | 300      | 0.308  | ug/l # | 25     |
| 16) Acetone                    | 2.43  | 43   | 1540     | 1.513  | ug/l # | 73     |
| 20) Methylene Chloride         | 2.84  | 84   | 935      | 0.543  | ug/l # | 68     |
| 25) 2-Butanone                 | 4.67  | 43   | 296      | 0.203  | ug/l # | 51     |
| 31) Cyclohexane                | 5.65  | 56   | 3229     | 1.207  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 12138    | 4.694  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 14625    | 5.568  | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 949      | 0.304  | ug/l   | 92     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 65986    | 25.638 | ug/l # | 38     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 65986    | 73.472 | ug/l # | 8      |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.00 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

Instrument :

MSVOA\_X

ClientSampleId :

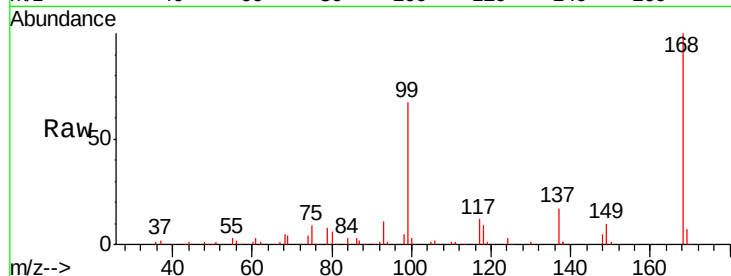
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Tgt Ion:168 Resp: 132000

Ion Ratio Lower Upper

168 100

99 66.6 51.4 77.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

40000

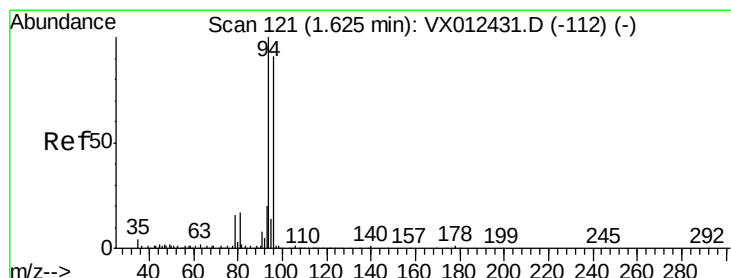
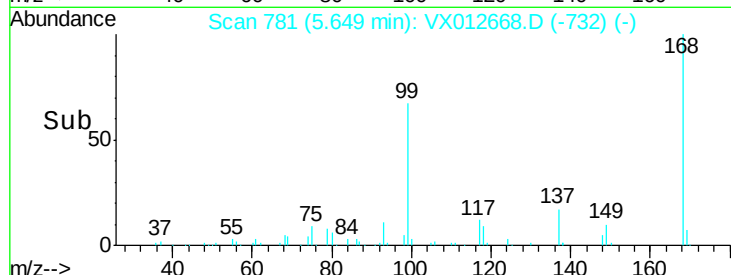
30000

20000

10000

0

Time-->



#5

Bromomethane

Concen: 0.845 ug/l

RT: 1.64 min Scan# 123

Delta R.T. 0.01 min

Lab File: VX012668.D

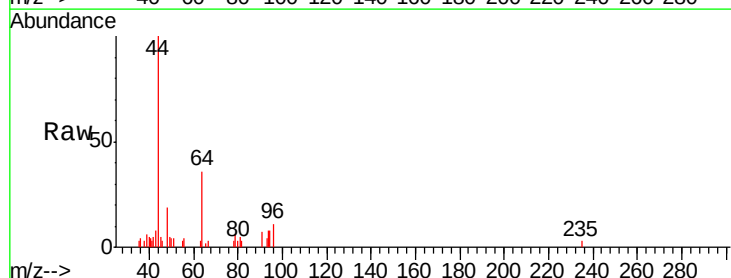
Acq: 26 Sep 2019 12:49

Tgt Ion: 94 Resp: 563

Ion Ratio Lower Upper

94 100

96 74.1 72.8 109.2



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

400

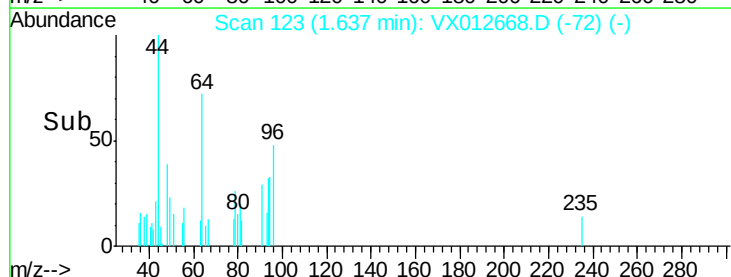
300

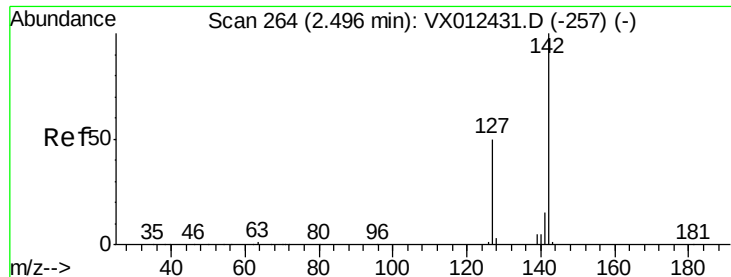
200

100

0

Time-->

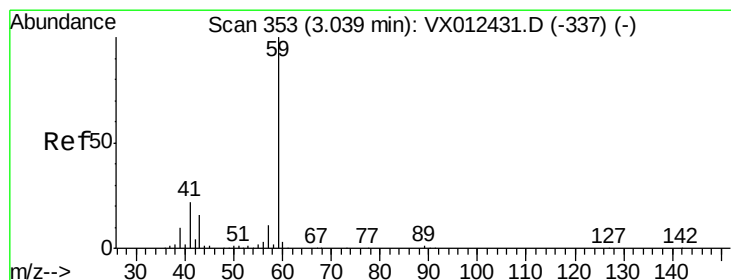
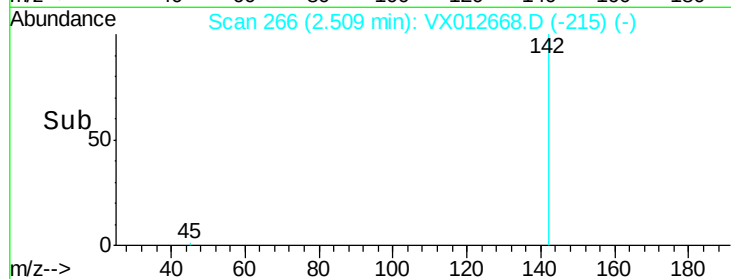
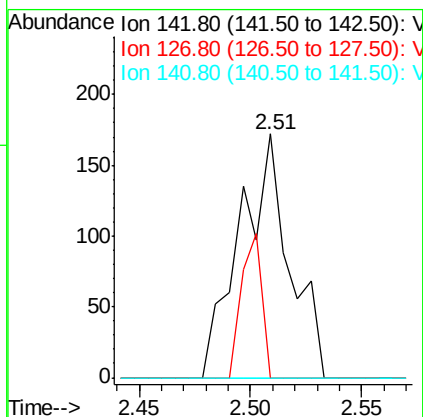
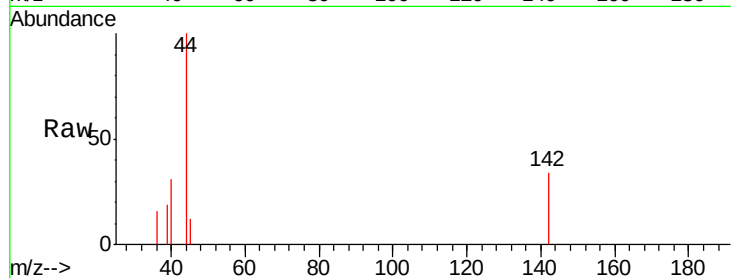




#10  
Methyl Iodide  
Concen: 5.110 ug/l  
RT: 2.51 min Scan# 266  
Delta R.T. 0.01 min  
Lab File: VX012668.D  
Acq: 26 Sep 2019 12:49

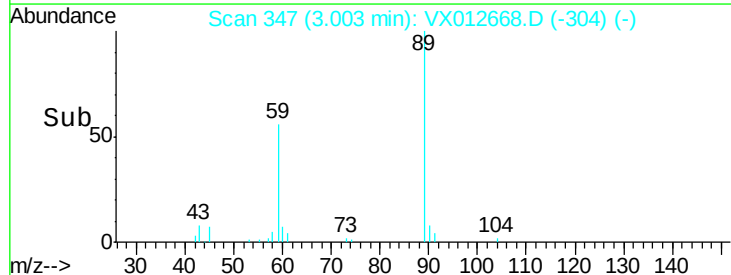
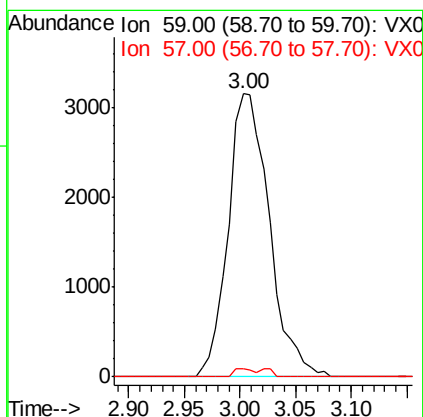
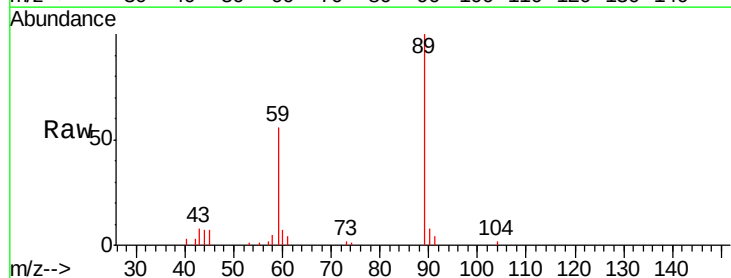
Instrument :  
MSVOA\_X  
ClientSampleId :  
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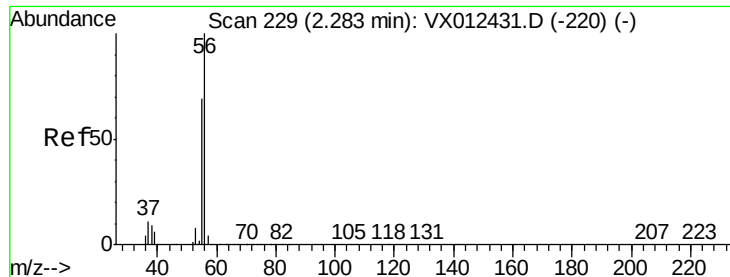
Tgt Ion: 142 Resp: 266  
Ion Ratio Lower Upper  
142 100  
127 24.4 40.8 61.2#  
141 0.0 12.1 18.1#



#11  
Tert butyl alcohol  
Concen: 16.836 ug/l  
RT: 3.00 min Scan# 347  
Delta R.T. -0.04 min  
Lab File: VX012668.D  
Acq: 26 Sep 2019 12:49

Tgt Ion: 59 Resp: 8084  
Ion Ratio Lower Upper  
59 100  
57 1.4 8.3 12.5#





#13

Acrolein

Concen: 10.602 ug/l

RT: 2.27 min Scan# 227

Delta R.T. -0.01 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

Instrument :

MSVOA\_X

ClientSampled :

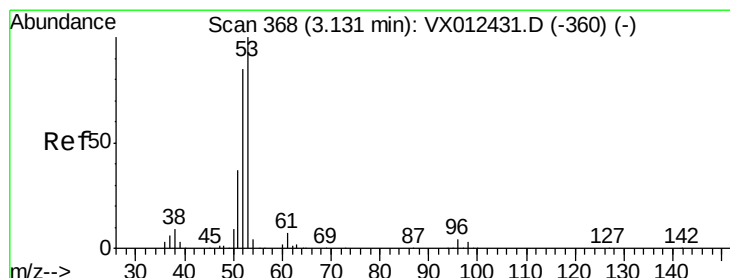
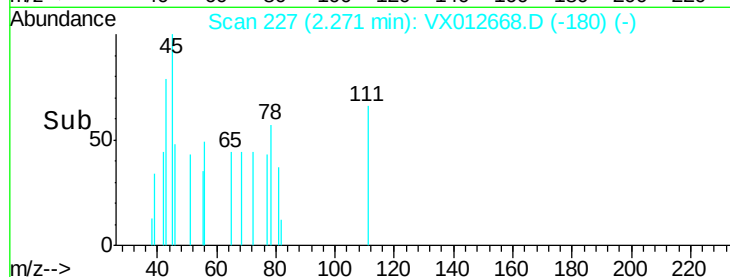
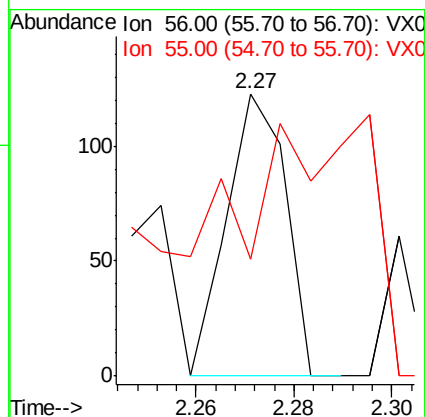
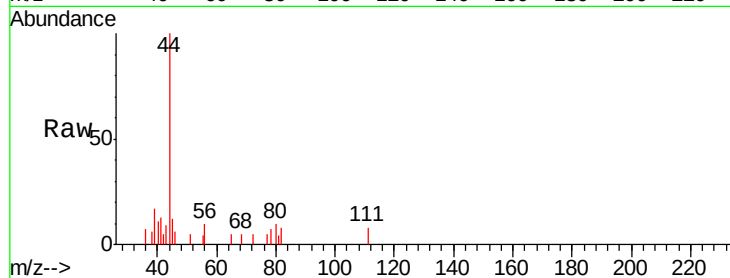
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Tgt Ion: 56 Resp: 103

Ion Ratio Lower Upper

56 100

55 0.0 55.8 83.8#



#15

Acrylonitrile

Concen: 0.308 ug/l

RT: 3.15 min Scan# 371

Delta R.T. 0.02 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

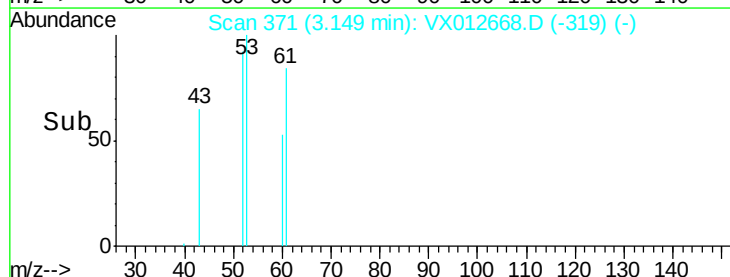
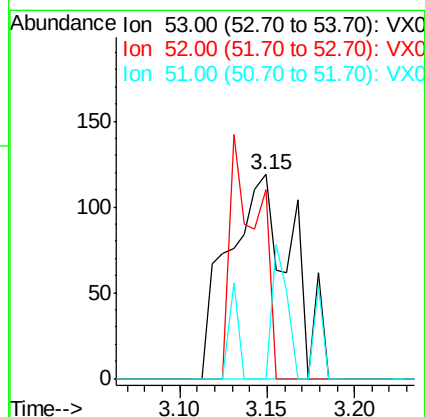
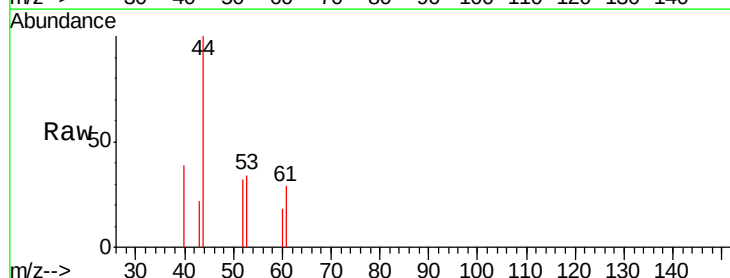
Tgt Ion: 53 Resp: 300

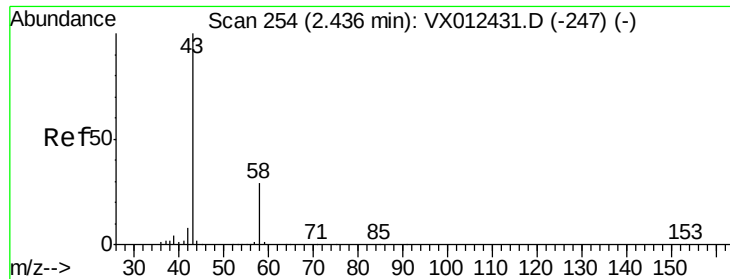
Ion Ratio Lower Upper

53 100

52 0.0 67.0 100.4#

51 15.7 29.6 44.4#





#16

Acetone

Concen: 1.513 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.01 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

Instrument :

MSVOA\_X

ClientSampleId :

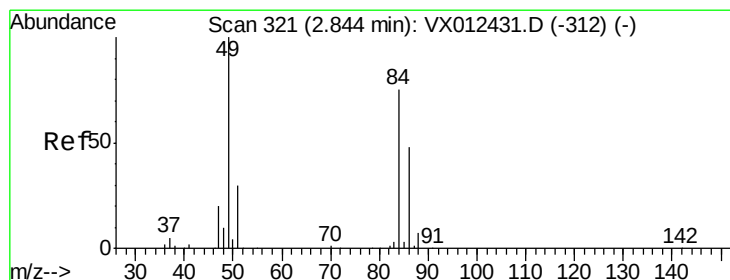
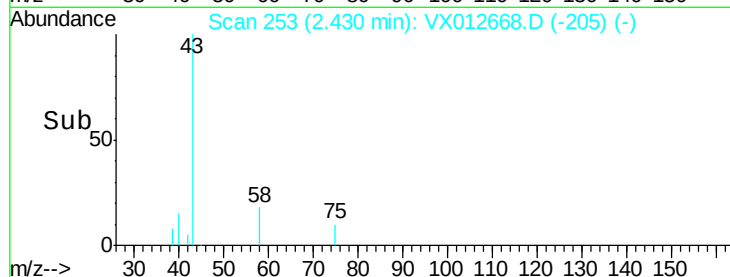
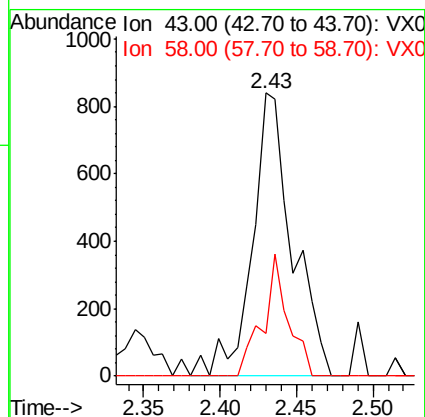
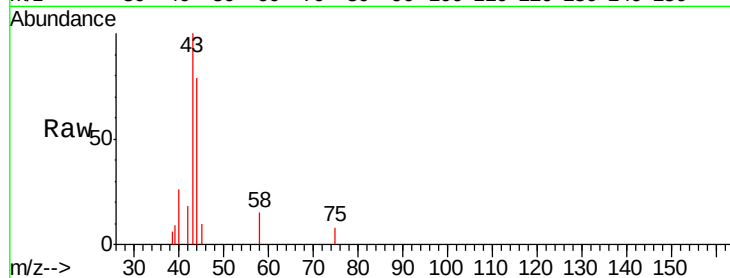
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Tgt Ion: 43 Resp: 1540

Ion Ratio Lower Upper

43 100

58 14.9 23.3 34.9#



#20

Methylene Chloride

Concen: 0.543 ug/l

RT: 2.84 min Scan# 321

Delta R.T. 0.00 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

Tgt Ion: 84 Resp: 935

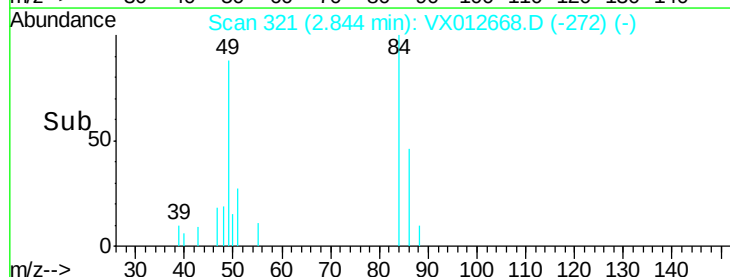
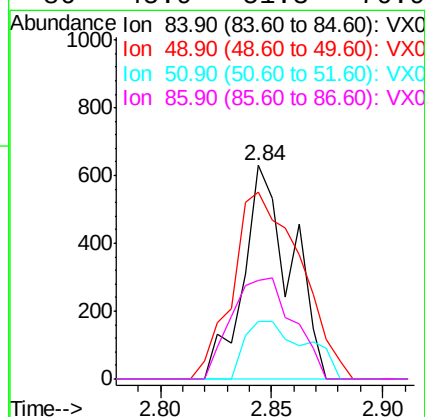
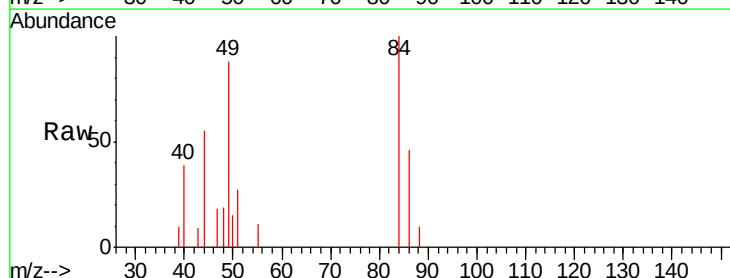
Ion Ratio Lower Upper

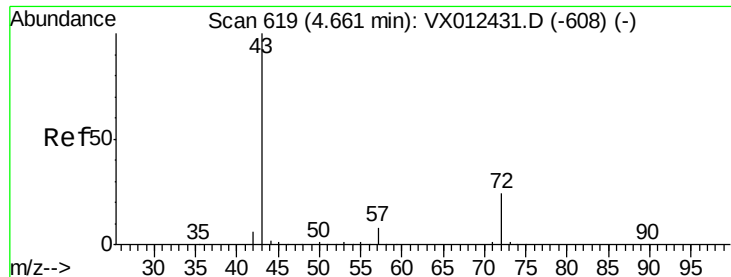
84 100

49 87.8 106.8 160.2#

51 27.0 32.3 48.5#

86 45.9 51.3 76.9#





#25

2-Butanone

Concen: 0.203 ug/l

RT: 4.67 min Scan# 620

Delta R.T. 0.01 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

Instrument :

MSVOA\_X

ClientSampled :

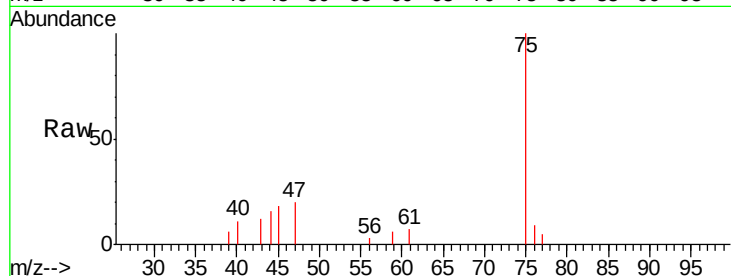
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Tgt Ion: 43 Resp: 296

Ion Ratio Lower Upper

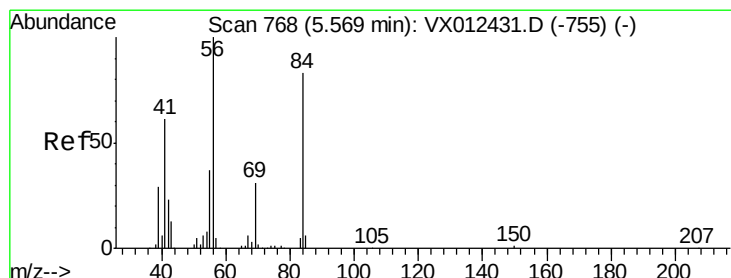
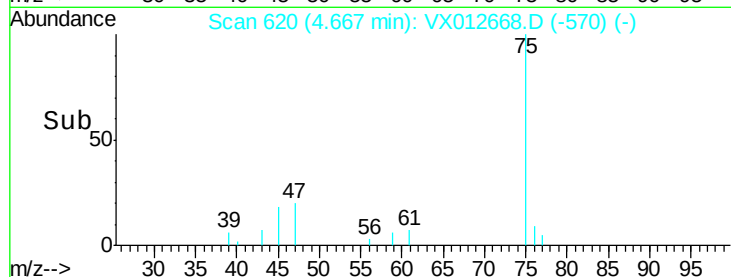
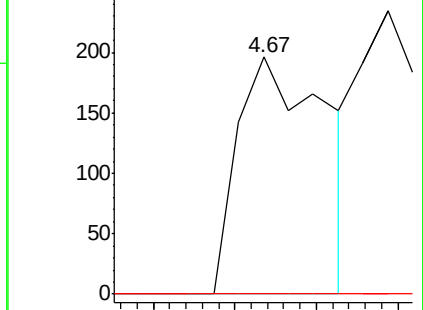
43 100

72 0.0 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



#31

Cyclohexane

Concen: 1.207 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.08 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

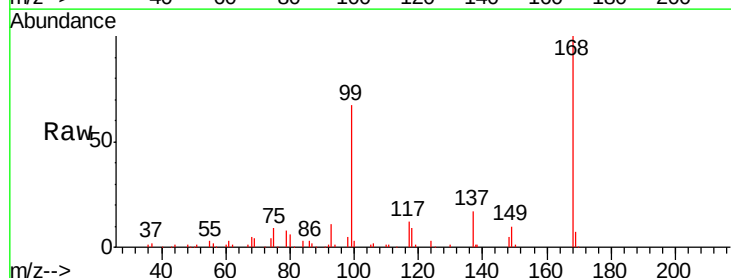
Tgt Ion: 56 Resp: 3229

Ion Ratio Lower Upper

56 100

69 180.5 25.0 37.6#

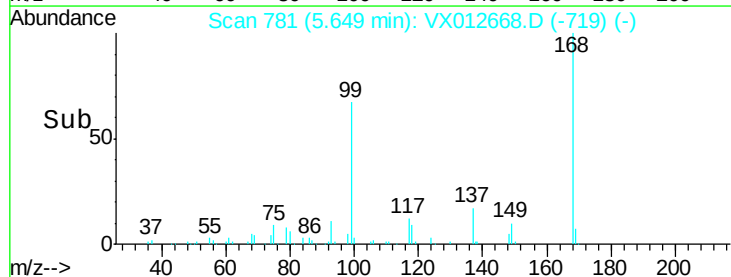
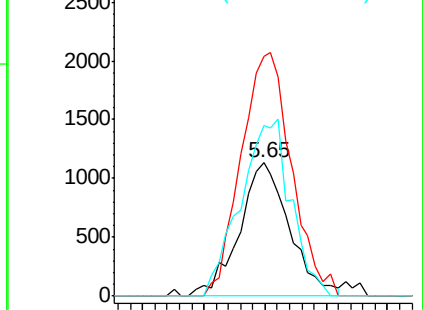
84 127.9 66.4 99.6#

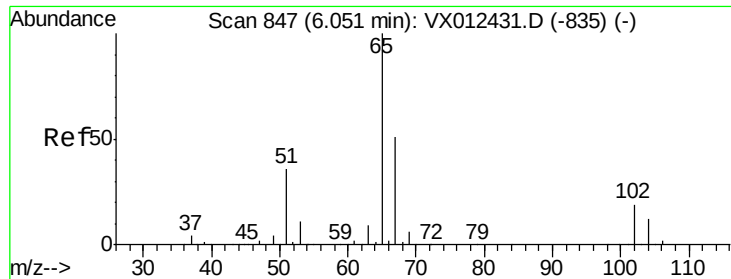


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0

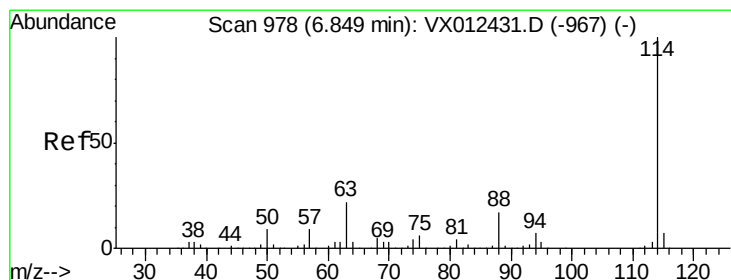
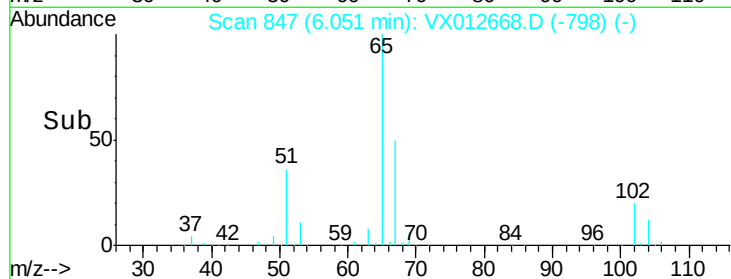
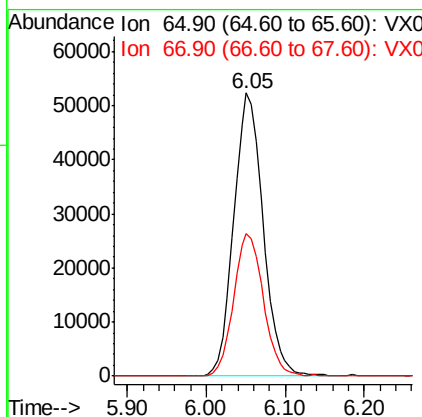
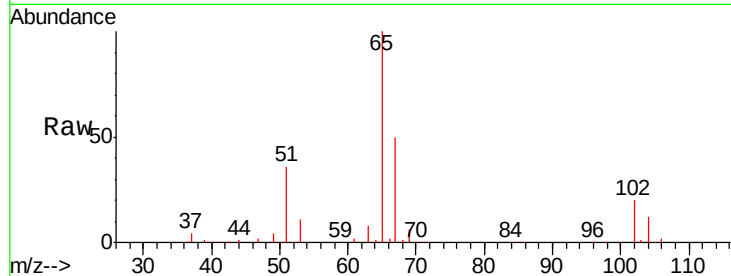




#33  
 1,2-Dichloroethane-d4  
 Concen: 70.706 ug/l  
 RT: 6.05 min Scan# 847  
 Delta R.T. 0.00 min  
 Lab File: VX012668.D  
 Acq: 26 Sep 2019 12:49

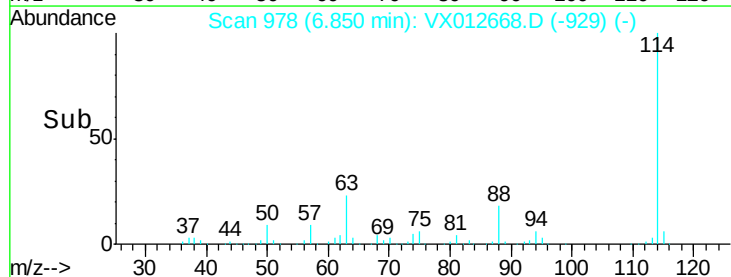
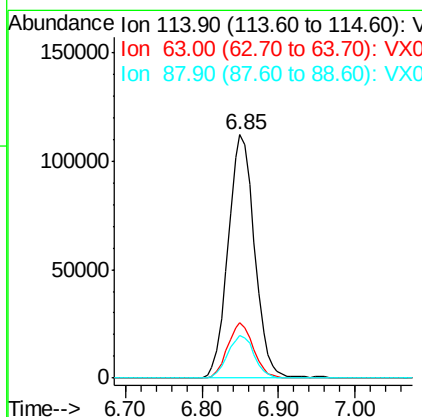
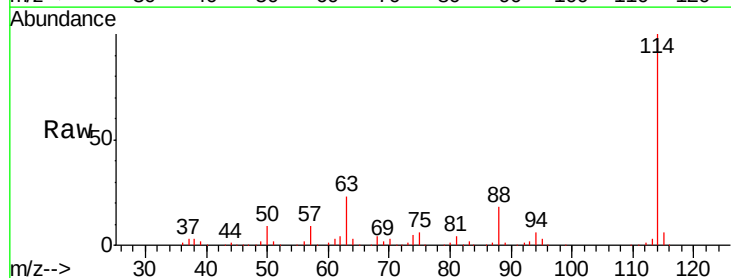
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
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Tgt Ion: 65 Resp: 135910  
 Ion Ratio Lower Upper  
 65 100  
 67 50.8 0.0 101.2

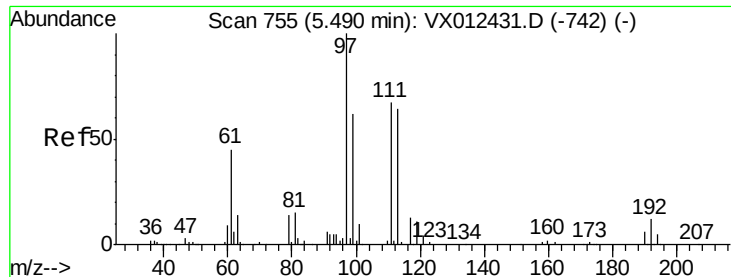


#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 978  
 Delta R.T. 0.00 min  
 Lab File: VX012668.D  
 Acq: 26 Sep 2019 12:49

Tgt Ion: 114 Resp: 268273  
 Ion Ratio Lower Upper  
 114 100  
 63 22.9 0.0 43.2  
 88 17.7 0.0 33.2







#35

Dibromofluoromethane

Concen: 57.732 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

Instrument :

MSVOA\_X

ClientSampleId :

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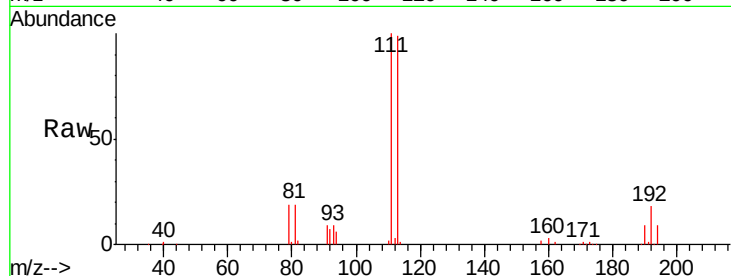
Tgt Ion:113 Resp: 92237

Ion Ratio Lower Upper

113 100

111 104.2 83.4 125.2

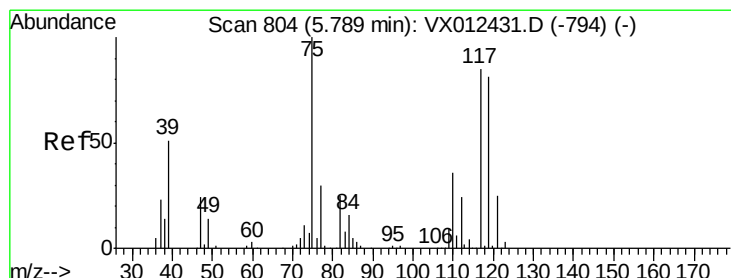
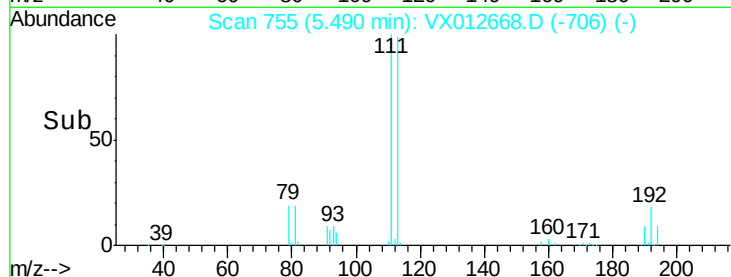
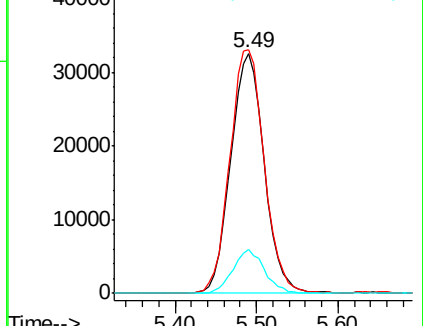
192 17.3 14.4 21.6



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



#36

1,1-Dichloropropene

Concen: 4.694 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.13 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

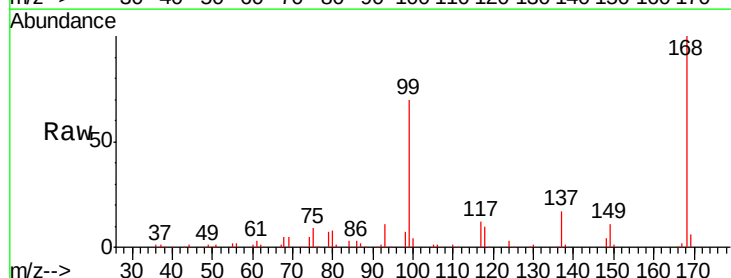
Tgt Ion: 75 Resp: 12138

Ion Ratio Lower Upper

75 100

110 9.2 16.7 50.0#

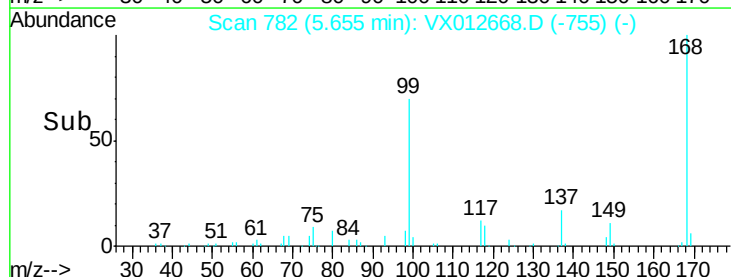
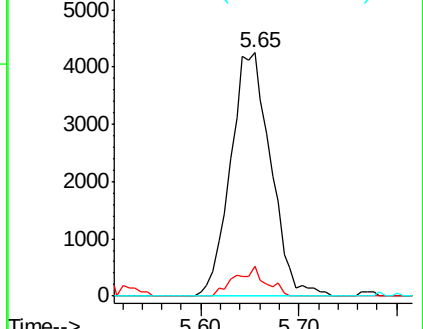
77 0.0 24.2 36.2#

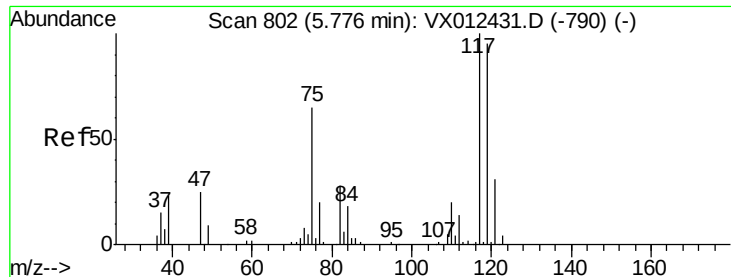


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

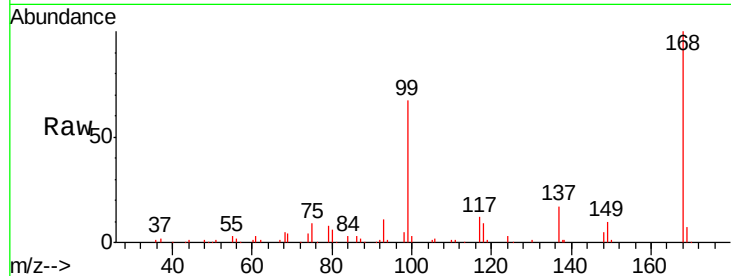




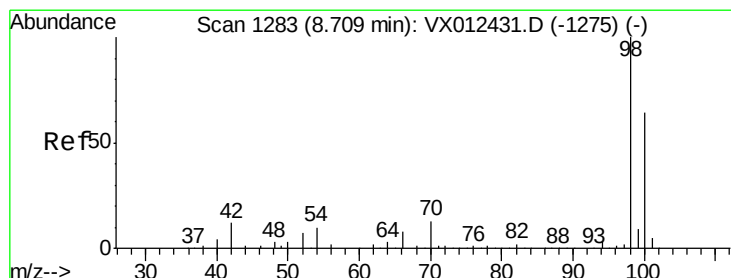
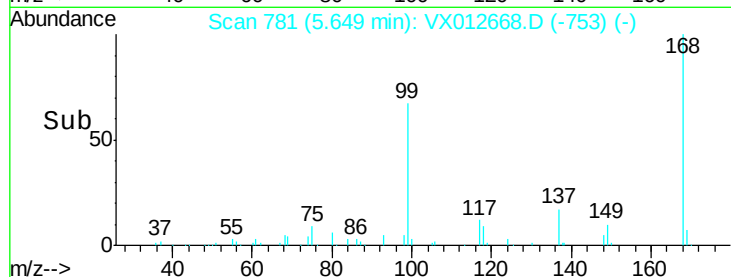
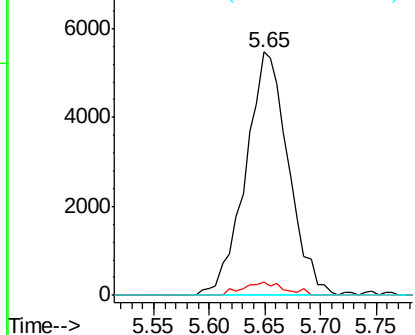
#38  
Carbon Tetrachloride  
Concen: 5.568 ug/l  
RT: 5.65 min Scan# 781  
Delta R.T. -0.13 min  
Lab File: VX012668.D  
Acq: 26 Sep 2019 12:49

Instrument :  
MSVOA\_X  
ClientSampleId :  
TRIP-BLANK

Tgt Ion: 117 Resp: 14625  
Ion Ratio Lower Upper  
117 100  
119 5.3 75.7 113.5#  
121 0.0 24.2 36.4#

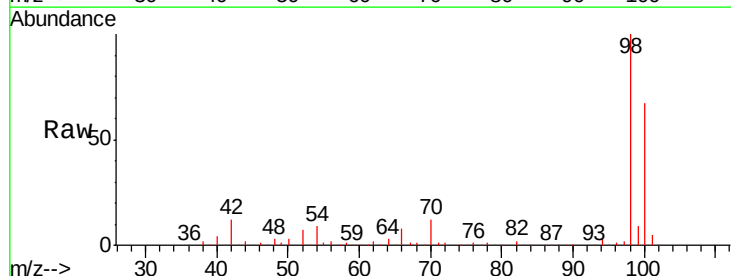


Abundance Ion 116.80 (116.50 to 117.50): V  
Ion 118.80 (118.50 to 119.50): V  
Ion 120.80 (120.50 to 121.50): V

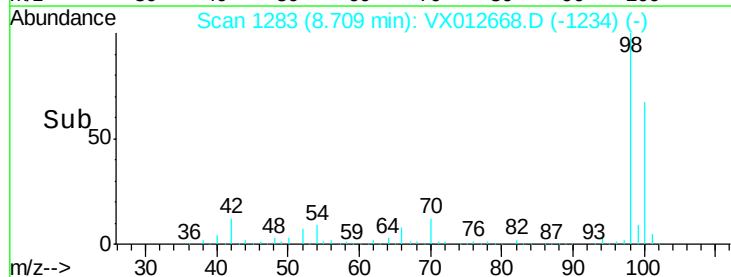
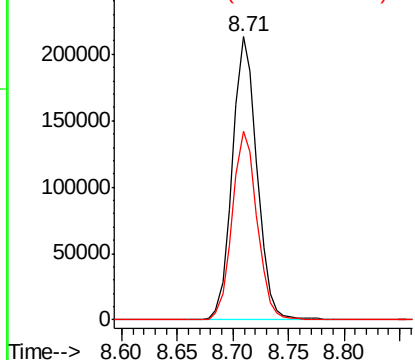


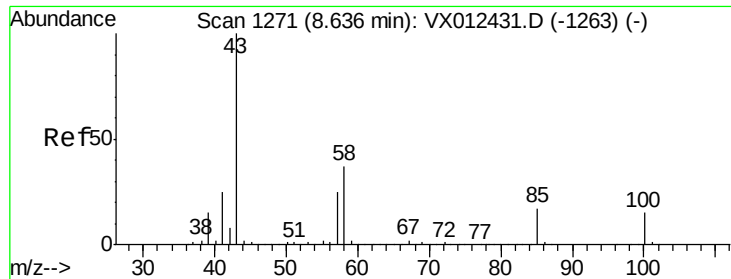
#50  
Toluene-d8  
Concen: 53.184 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX012668.D  
Acq: 26 Sep 2019 12:49

Tgt Ion: 98 Resp: 327230  
Ion Ratio Lower Upper  
98 100  
100 67.1 53.4 80.2



Abundance Ion 98.00 (97.70 to 98.70): VX0  
Ion 100.00 (99.70 to 100.70): V





#51

4-Methyl-2-Pentanone

Concen: 0.304 ug/l

RT: 8.64 min Scan# 1271

Delta R.T. 0.00 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

Instrument :

MSVOA\_X

ClientSampleId :

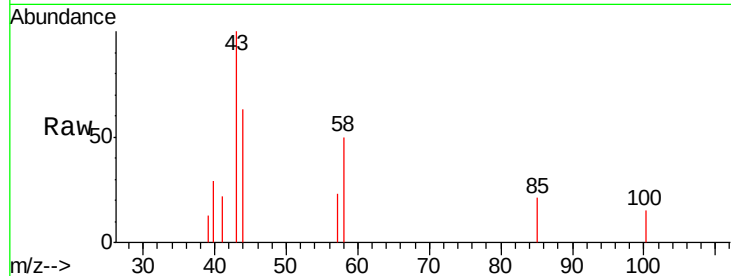
TRIP-BLANK

Tgt Ion: 43 Resp: 949

Ion Ratio Lower Upper

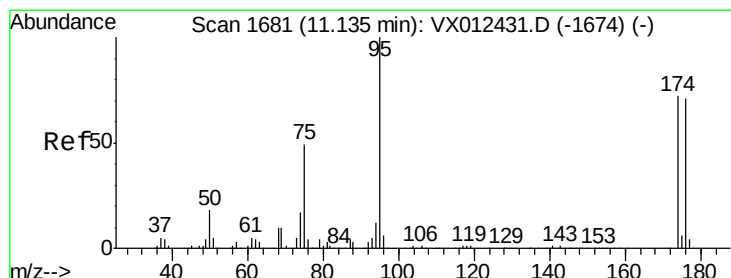
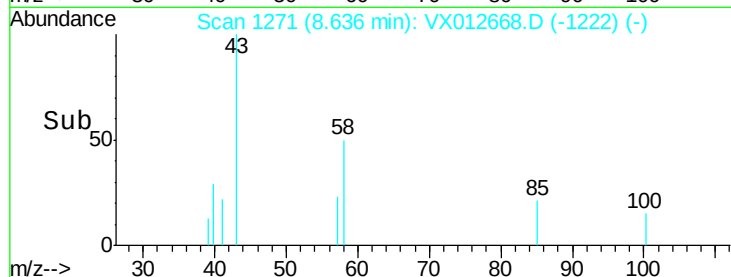
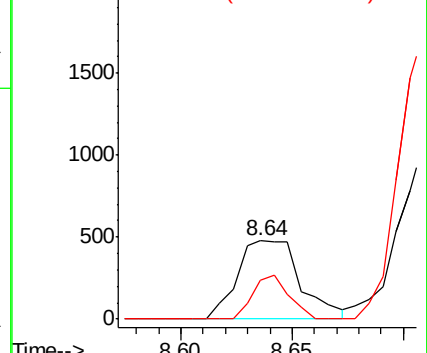
43 100

58 32.3 29.8 44.6



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#62

4-Bromofluorobenzene

Concen: 52.418 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.00 min

Lab File: VX012668.D

Acq: 26 Sep 2019 12:49

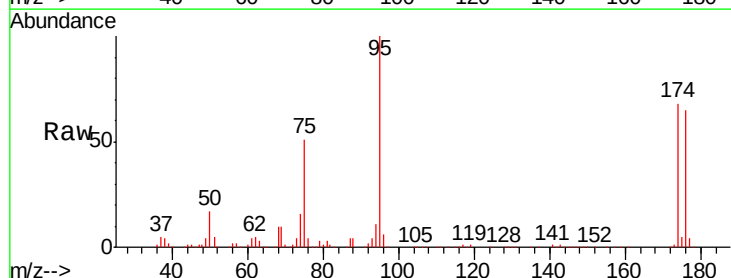
Tgt Ion: 95 Resp: 126815

Ion Ratio Lower Upper

95 100

174 66.7 0.0 140.0

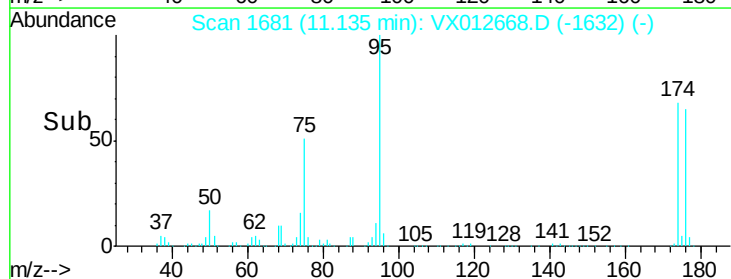
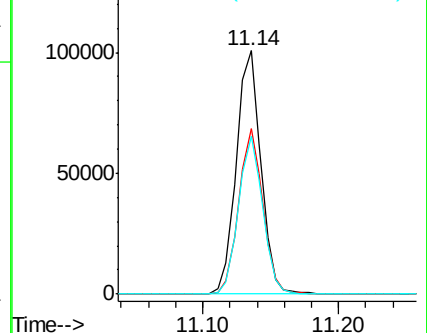
176 63.9 0.0 135.4

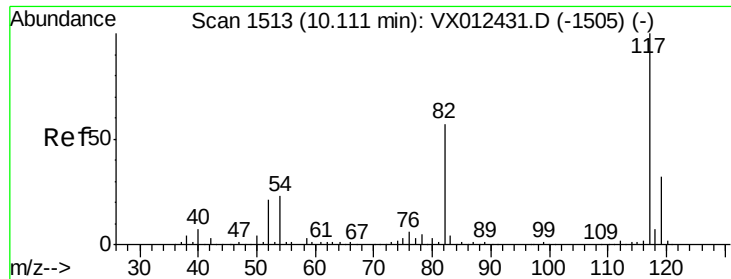


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

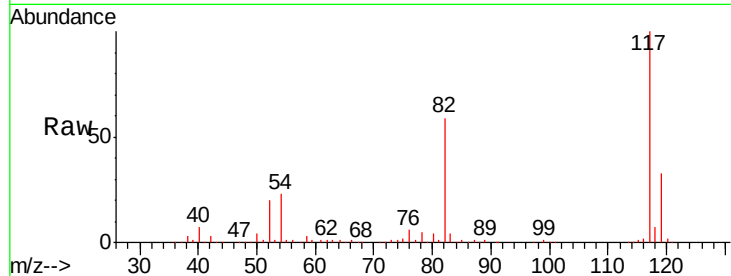




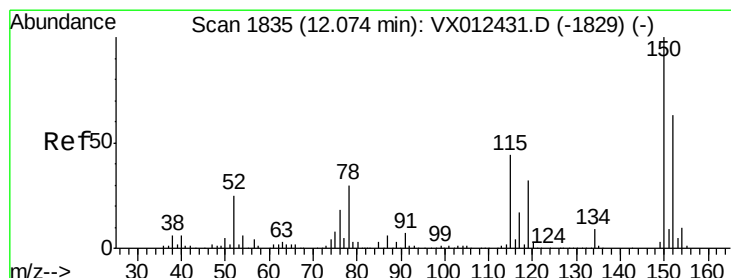
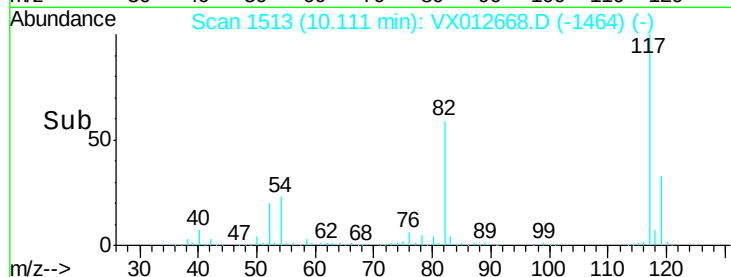
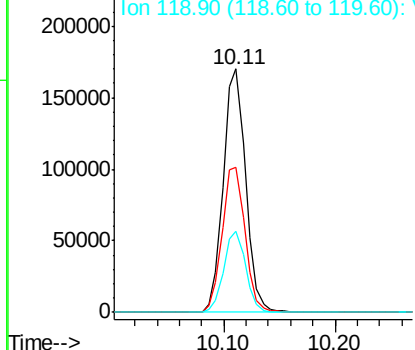
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX012668.D  
Acq: 26 Sep 2019 12:49

Instrument :  
MSVOA\_X  
ClientSampled :  
TRIP-BLANK

Tgt Ion:117 Resp: 237269  
Ion Ratio Lower Upper  
117 100  
82 59.4 45.9 68.9  
119 33.1 25.3 37.9

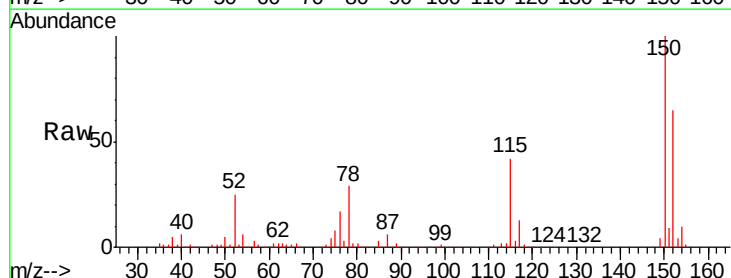


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

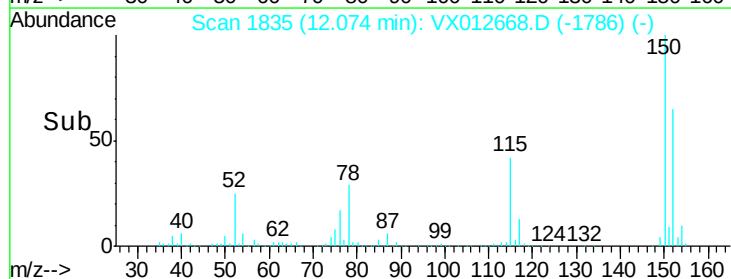
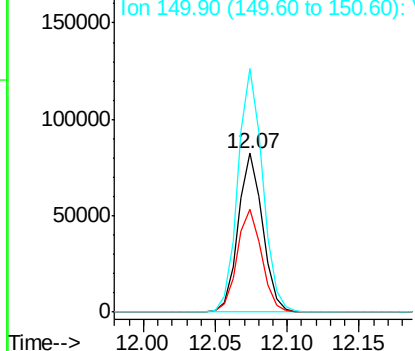


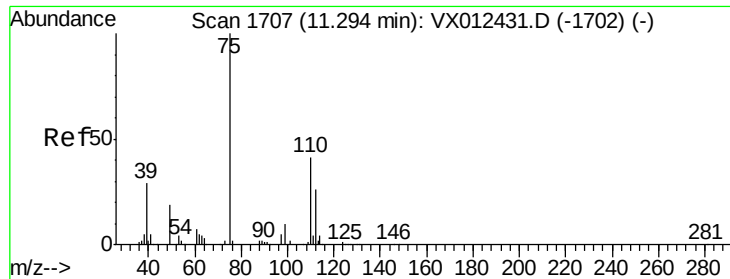
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. 0.00 min  
Lab File: VX012668.D  
Acq: 26 Sep 2019 12:49

Tgt Ion:152 Resp: 97299  
Ion Ratio Lower Upper  
152 100  
115 65.2 44.1 132.3  
150 155.8 0.0 343.8



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

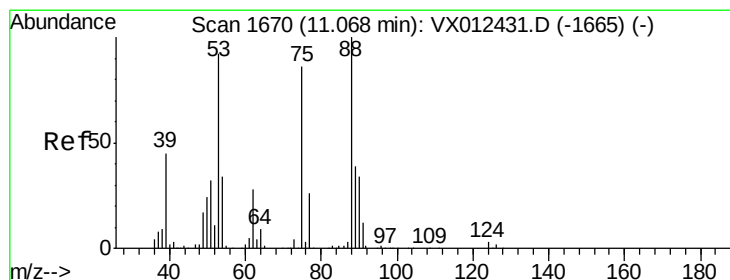
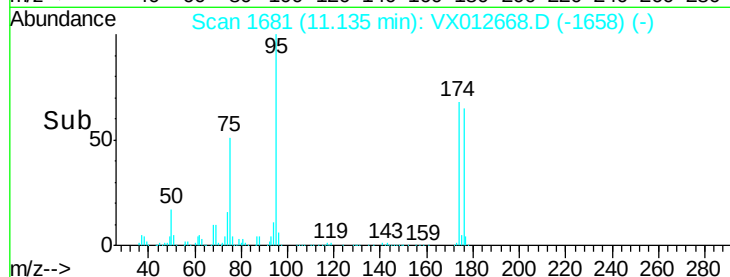
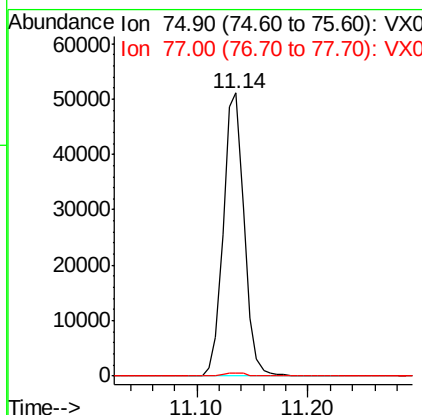
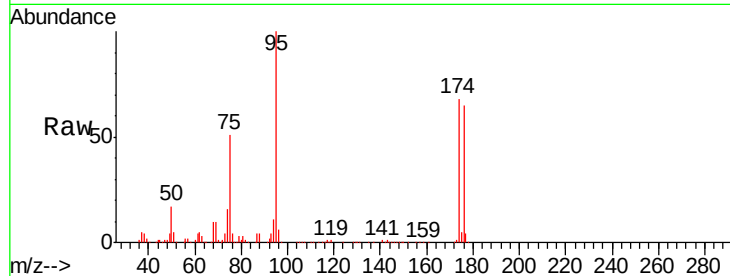




#76  
 1,2,3-Trichloropropane  
 Concen: 25.638 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. -0.16 min  
 Lab File: VX012668.D  
 Acq: 26 Sep 2019 12:49

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 TRIP-BLANK

Tgt Ion: 75 Resp: 65986  
 Ion Ratio Lower Upper  
 75 100  
 77 1.1 19.7 59.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 73.472 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. 0.07 min  
 Lab File: VX012668.D  
 Acq: 26 Sep 2019 12:49

Tgt Ion: 75 Resp: 65986  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 83.6 125.4#  
 89 0.0 36.3 54.5#

