

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX040119\  
 Data File : VX008568.D  
 Acq On : 01 Apr 2019 15:00  
 Operator : JC/SP  
 Sample : K2189-06RE  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-VPB201R-GW-818-820

Quant Time: Apr 02 01:11:36 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 26 07:57:20 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 231922   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 387872   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 337429   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 139989   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.06  | 65   | 161395   | 45.90 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.80% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 118246   | 46.75 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.50% |          |
| 50) Toluene-d8              | 8.71  | 98   | 486969   | 48.15 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 96.30% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 164181   | 43.81 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.62% |          |

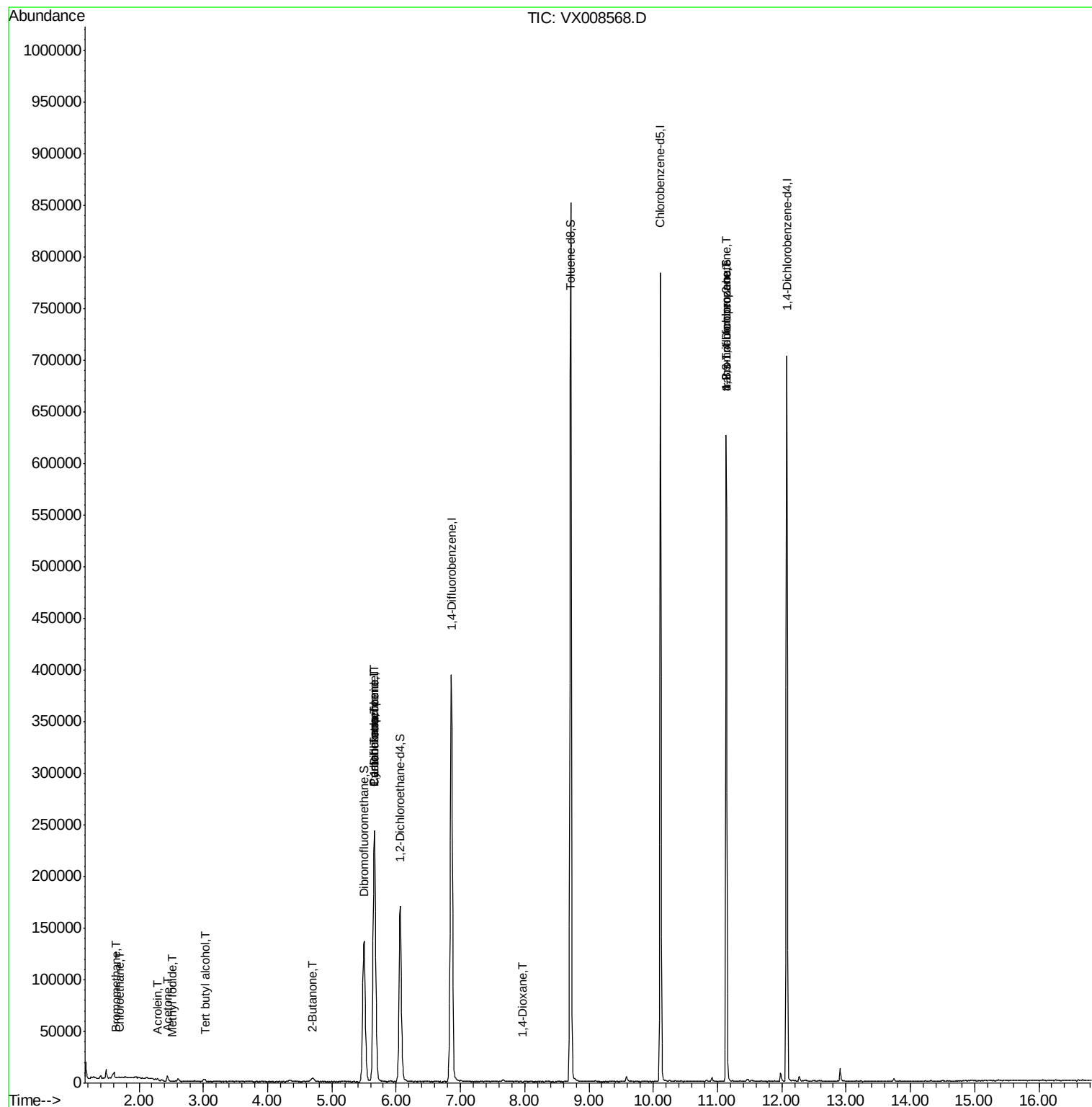
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 670      | Below Cal |        | 90     |
| 5) Bromomethane                | 1.64  | 94   | 385      | 1.993     | ug/l # | 73     |
| 6) Chloroethane                | 1.71  | 64   | 610      | 0.270     | ug/l   | 91     |
| 10) Methyl Iodide              | 2.51  | 142  | 44       | 4.145     | ug/l # | 42     |
| 11) Tert butyl alcohol         | 3.03  | 59   | 1625     | 2.086     | ug/l # | 79     |
| 13) Acrolein                   | 2.29  | 56   | 182      | 0.322     | ug/l # | 29     |
| 16) Acetone                    | 2.44  | 43   | 5107     | 2.779     | ug/l   | 98     |
| 17) Carbon Disulfide           | 2.57  | 76   | 940      | Below Cal | #      | 77     |
| 20) Methylene Chloride         | 2.87  | 84   | 250      | Below Cal | #      | 75     |
| 21) trans-1,2-Dichloroethene   | 2.92  | 96   | 19       | Below Cal | #      | 1      |
| 25) 2-Butanone                 | 4.70  | 43   | 1852     | 0.629     | ug/l # | 86     |
| 31) Cyclohexane                | 5.66  | 56   | 5548     | 0.984     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 19785    | 4.784     | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 22515    | 6.524     | ug/l # | 15     |
| 49) 1,4-Dioxane                | 7.96  | 88   | 20       | 0.235     | ug/l # | 41     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 83813    | 20.139    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 83813    | 64.502    | ug/l # | 9      |

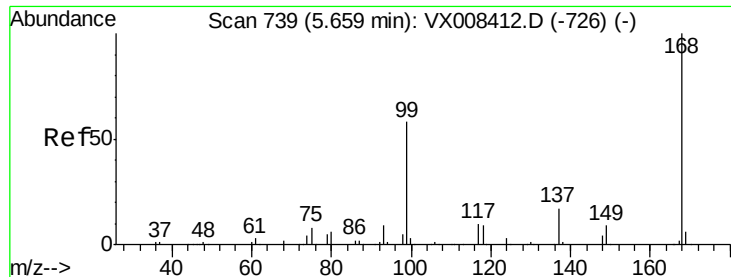
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX040119\  
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Sample : K2189-06RE  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
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BP-VPB201R-GW-818-820

Quant Time: Apr 02 01:11:36 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
Quant Title : SW846 8260  
QLast Update : Tue Mar 26 07:57:20 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.00 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Instrument :

MSVOA\_X

ClientSampleId :

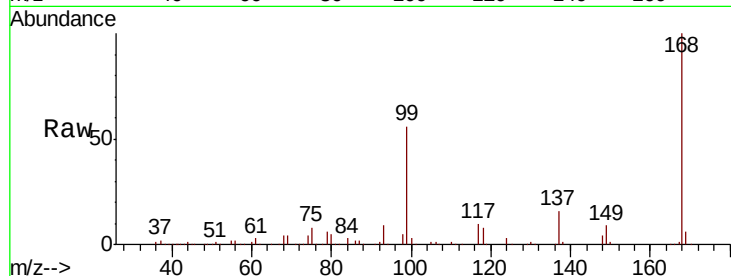
BP-VPB201R-GW-818-820

Tot Ion:168 Resp: 231922

Ion Ratio Lower Upper

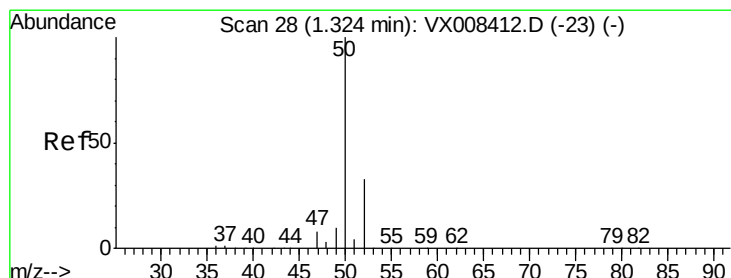
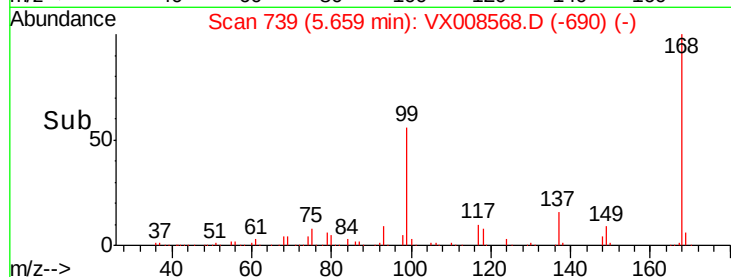
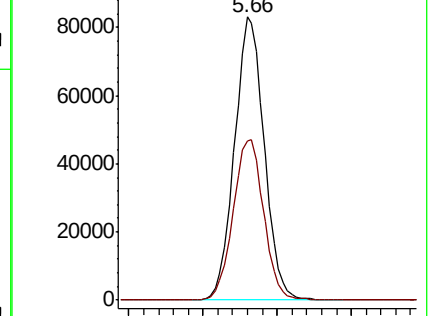
168 100

99 56.5 46.0 69.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX008568.D

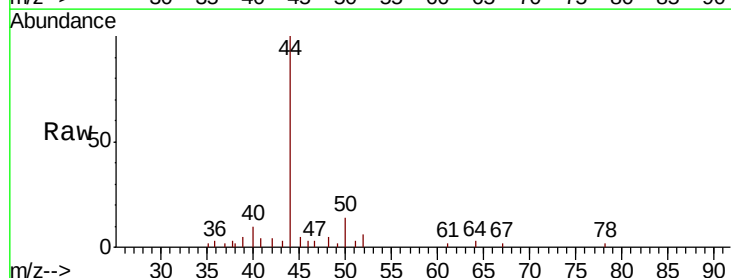
Acq: 01 Apr 2019 15:00

Tgt Ion: 50 Resp: 670

Ion Ratio Lower Upper

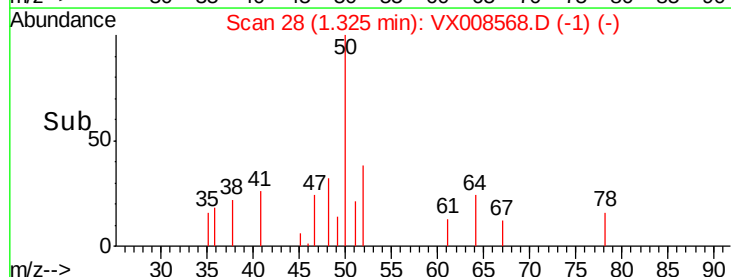
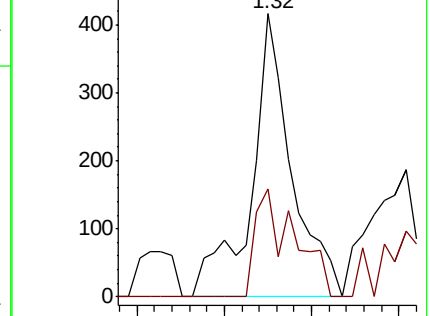
50 100

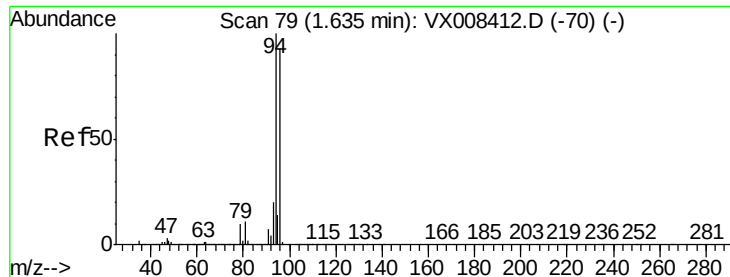
52 38.1 26.2 39.2



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: 1.993 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Instrument :

MSVOA\_X

ClientSampleId :

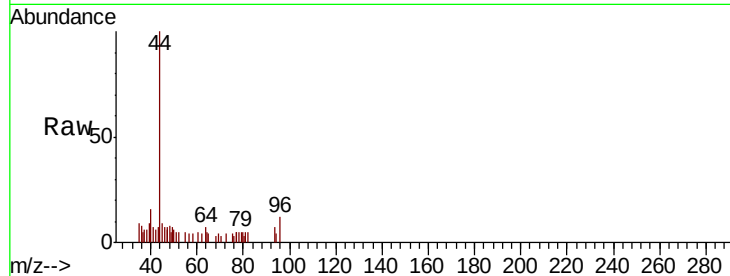
BP-VPB201R-GW-818-820

Tot Ion: 94 Resp: 385

Ion Ratio Lower Upper

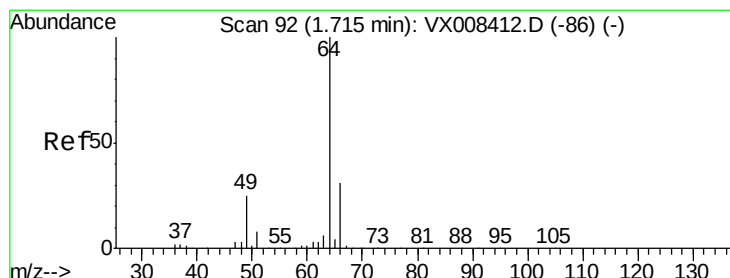
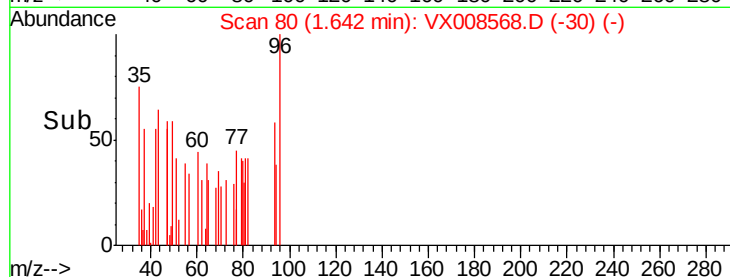
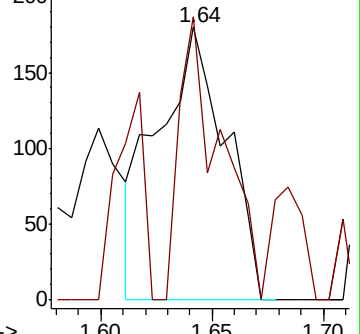
94 100

96 67.2 74.8 112.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: 0.270 ug/l

RT: 1.71 min Scan# 91

Delta R.T. -0.01 min

Lab File: VX008568.D

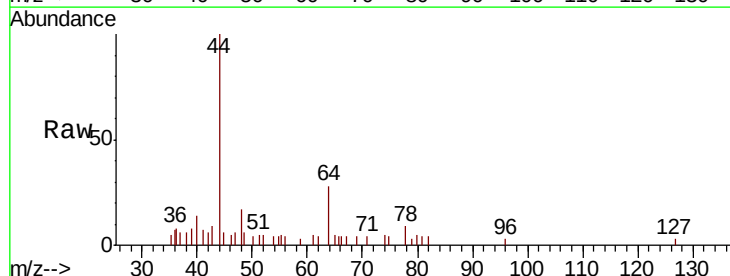
Acq: 01 Apr 2019 15:00

Tgt Ion: 64 Resp: 610

Ion Ratio Lower Upper

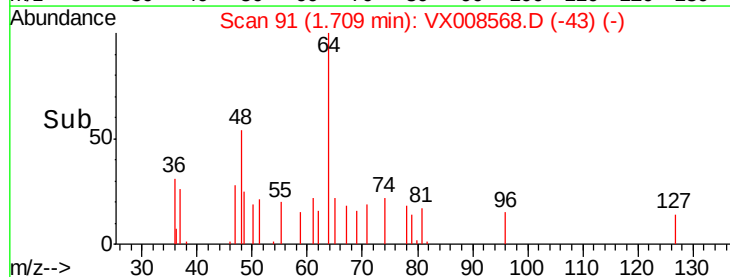
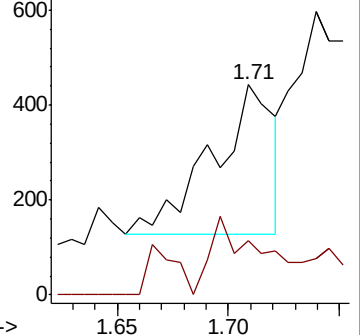
64 100

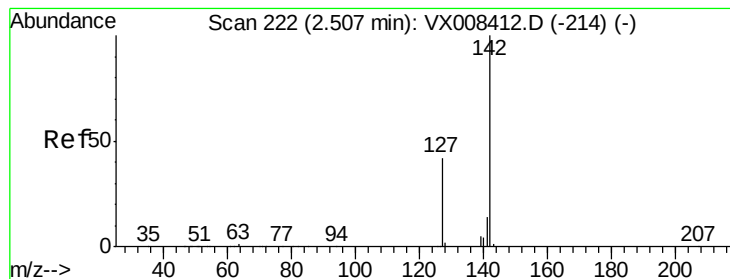
66 36.4 25.1 37.7



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0





#10

Methvl Iodide

Concen: 4.145 ug/l

RT: 2.51 min Scan# 222

Delta R.T. 0.00 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Instrument :

MSVOA\_X

ClientSampleId :

BP-VPB201R-GW-818-820

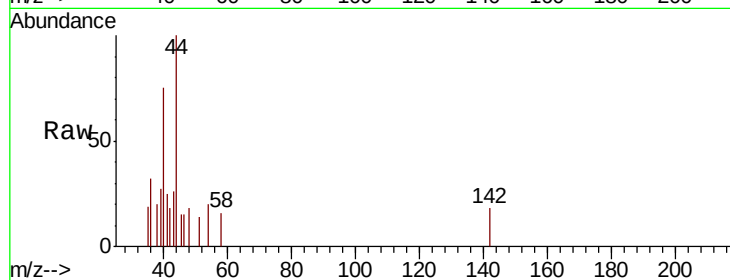
Tot Ion:142 Resp: 44

Ion Ratio Lower Upper

142 100

127 0.0 33.6 50.4#

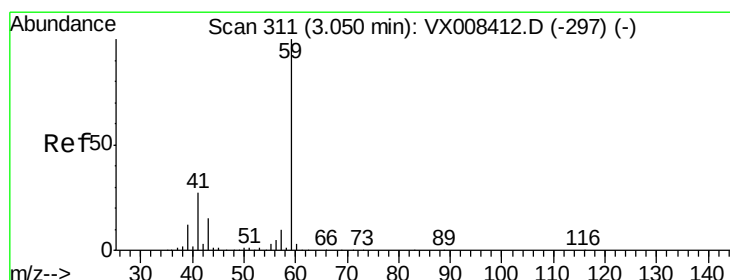
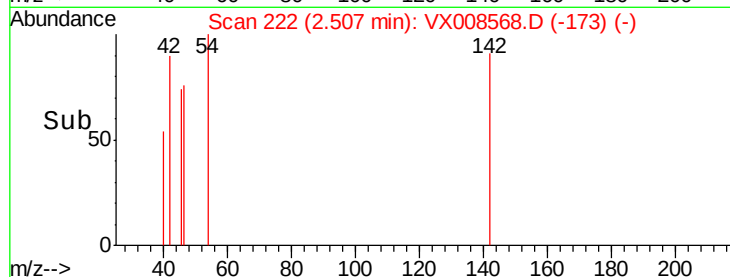
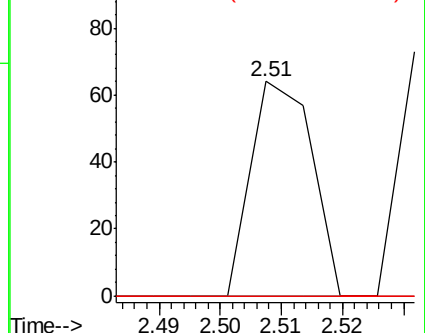
141 0.0 11.3 16.9#



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: 2.086 ug/l

RT: 3.03 min Scan# 307

Delta R.T. -0.02 min

Lab File: VX008568.D

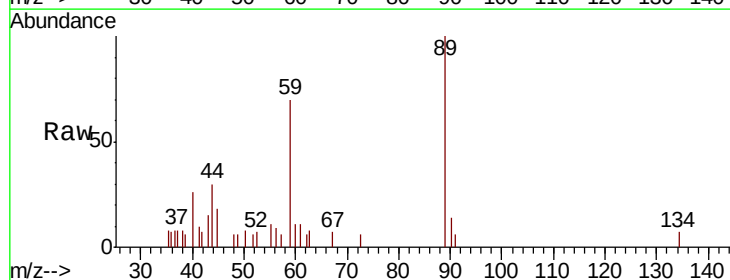
Acq: 01 Apr 2019 15:00

Tgt Ion: 59 Resp: 1625

Ion Ratio Lower Upper

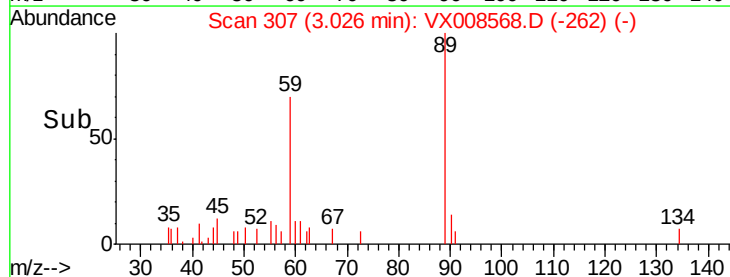
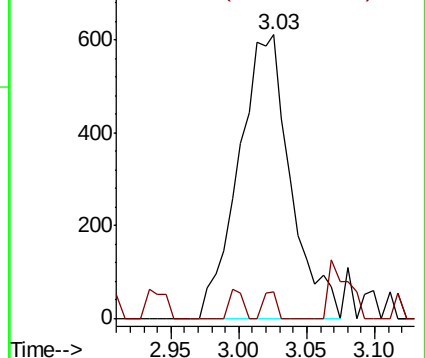
59 100

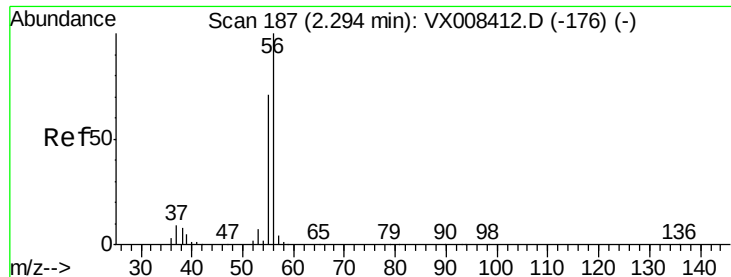
57 2.5 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

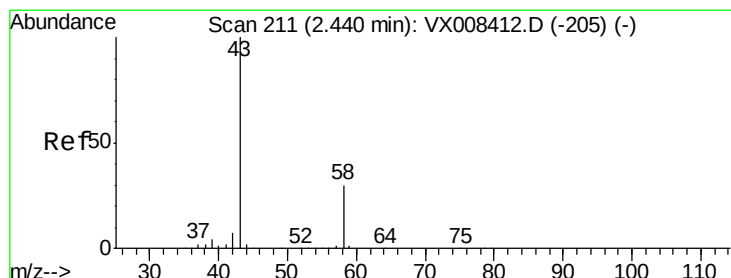
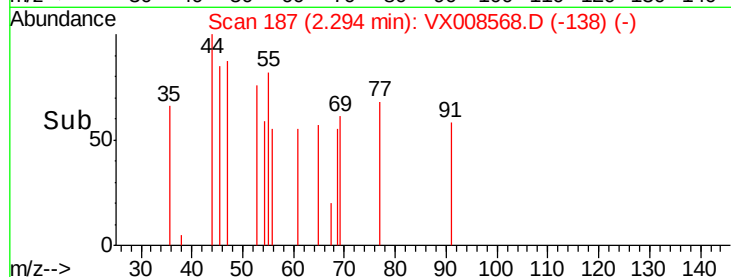
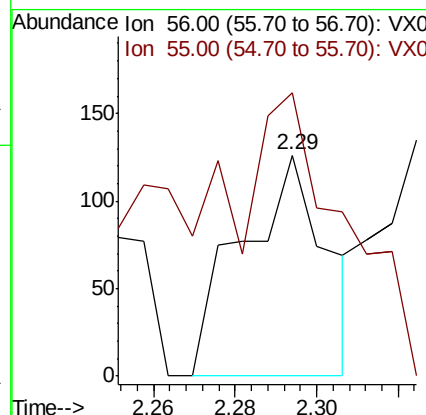
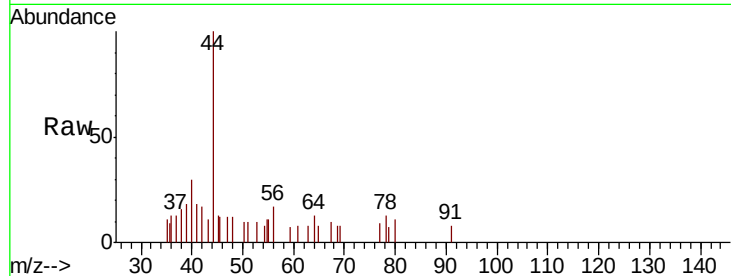




#13  
Acrolein  
Concen: 0.322 ug/l  
RT: 2.29 min Scan# 187  
Delta R.T. 0.00 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

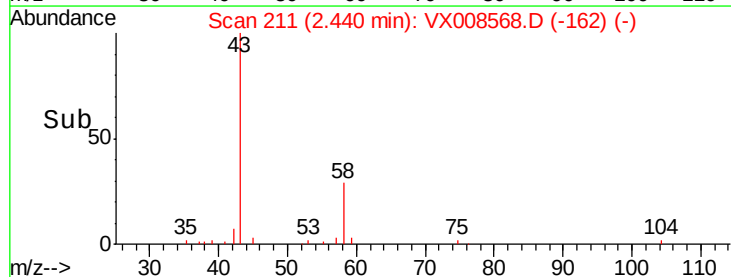
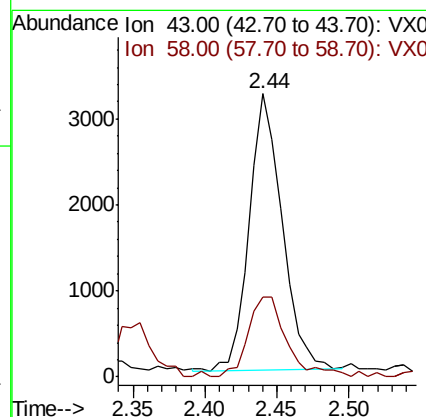
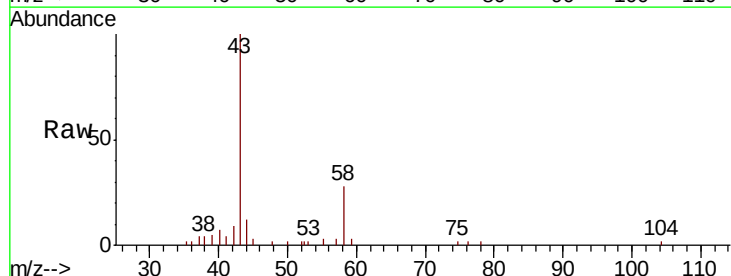
Instrument :  
MSVOA\_X  
ClientSampleId :  
BP-VPB201R-GW-818-820

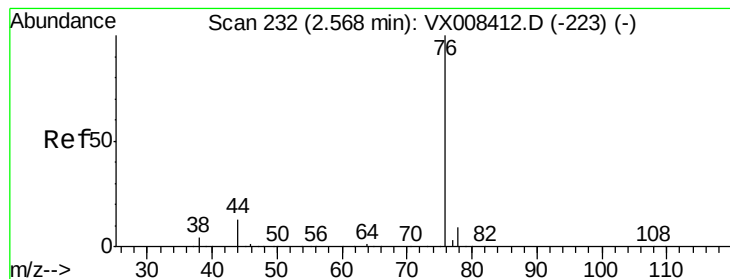
Tot Ion: 56 Resp: 182  
Ion Ratio Lower Upper  
56 100  
55 129.1 56.5 84.7#



#16  
Acetone  
Concen: 2.779 ug/l  
RT: 2.44 min Scan# 211  
Delta R.T. 0.00 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

Tgt Ion: 43 Resp: 5107  
Ion Ratio Lower Upper  
43 100  
58 28.8 24.2 36.2





#17

Carbon Disulfide

Concen: Below Cal

RT: 2.57 min Scan# 232

Delta R.T. 0.00 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Instrument :

MSVOA\_X

ClientSampleId :

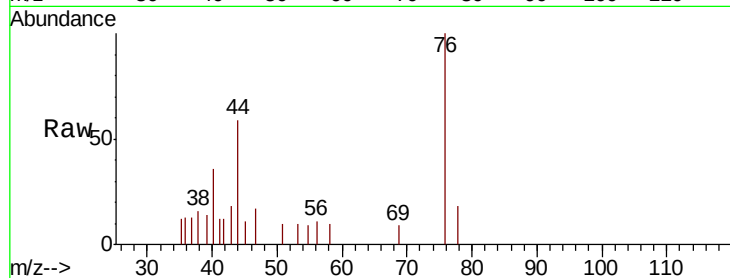
BP-VPB201R-GW-818-820

Tot Ion: 76 Resp: 940

Ion Ratio Lower Upper

76 100

78 17.8 7.4 11.2#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

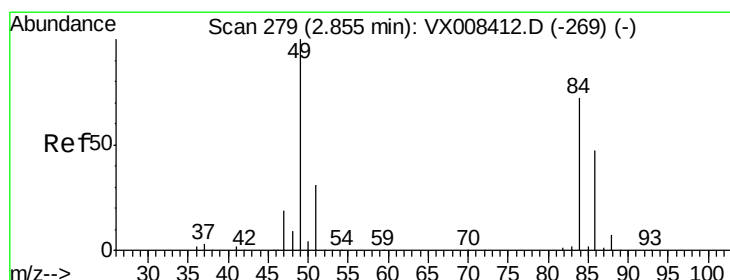
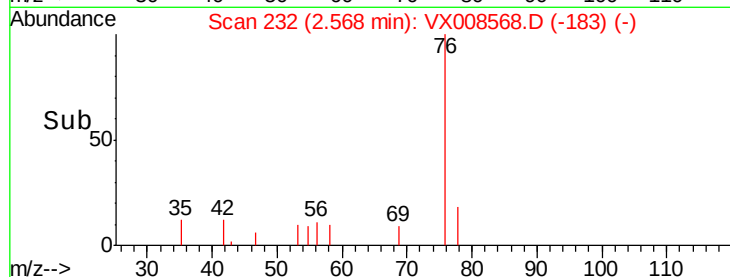
600

400

200

0

Time-->



#20

Methylene Chloride

Concen: Below Cal

RT: 2.87 min Scan# 281

Delta R.T. 0.01 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Tgt Ion: 84 Resp: 250

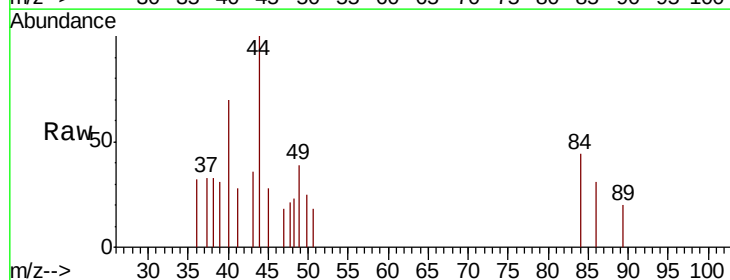
Ion Ratio Lower Upper

84 100

49 88.8 110.6 165.8#

51 40.0 33.9 50.9

86 69.6 52.2 78.2



Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0

300

250

200

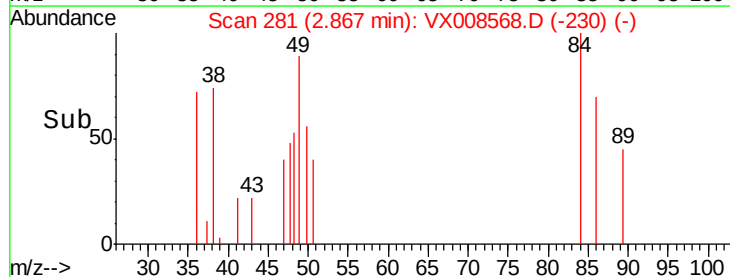
150

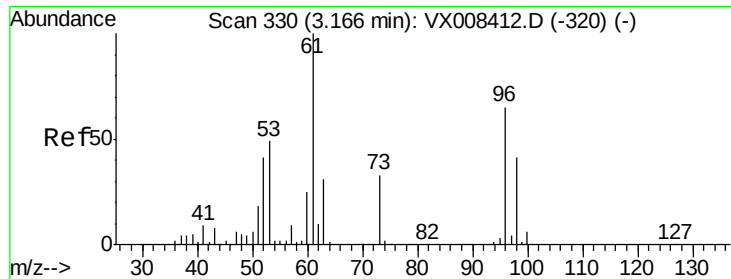
100

50

0

Time-->





#21

trans-1,2-Dichloroethene

Concen: Below Cal

RT: 2.92 min Scan# 290

Delta R.T. -0.24 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Instrument :

MSVOA\_X

ClientSampleId :

BP-VPB201R-GW-818-820

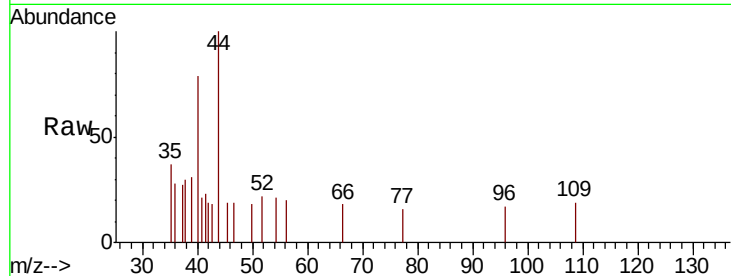
Tot Ion: 96 Resp: 19

Ion Ratio Lower Upper

96 100

61 0.0 122.6 184.0#

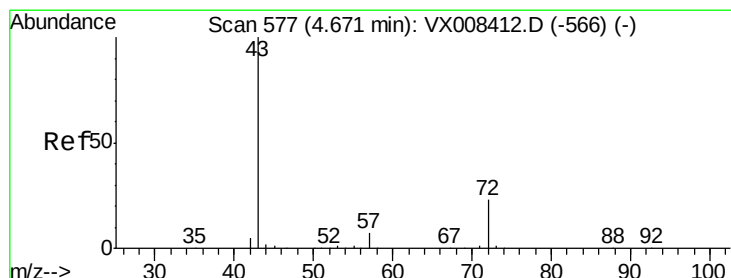
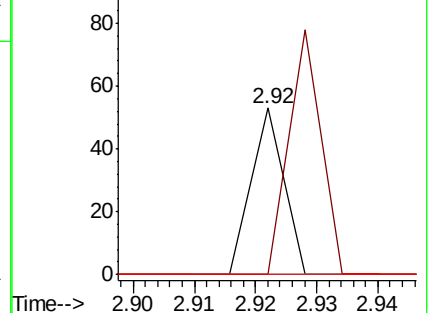
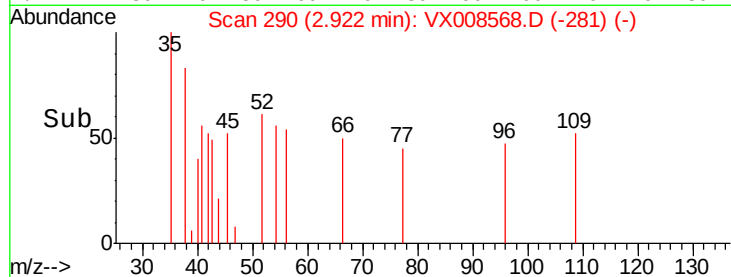
98 0.0 50.9 76.3#



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



#25

2-Butanone

Concen: 0.629 ug/l

RT: 4.70 min Scan# 581

Delta R.T. 0.02 min

Lab File: VX008568.D

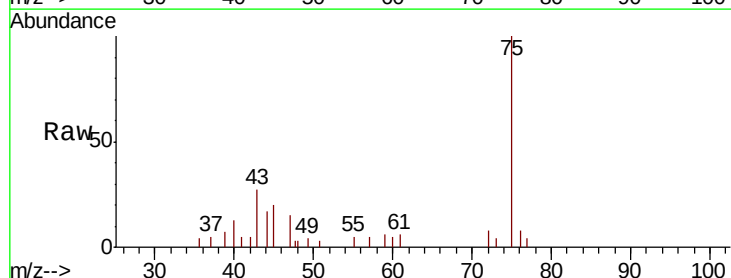
Acq: 01 Apr 2019 15:00

Tgt Ion: 43 Resp: 1852

Ion Ratio Lower Upper

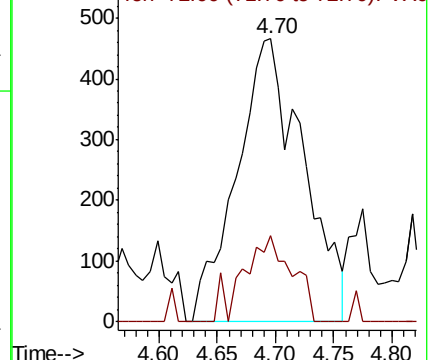
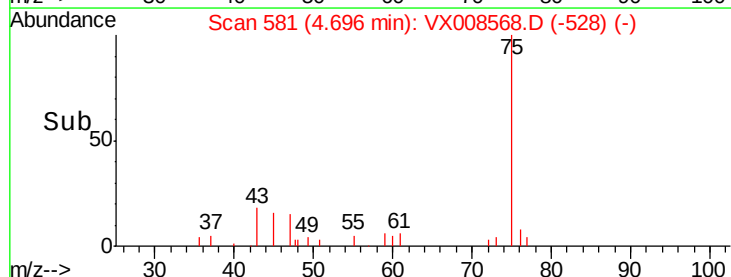
43 100

72 30.3 18.6 28.0#

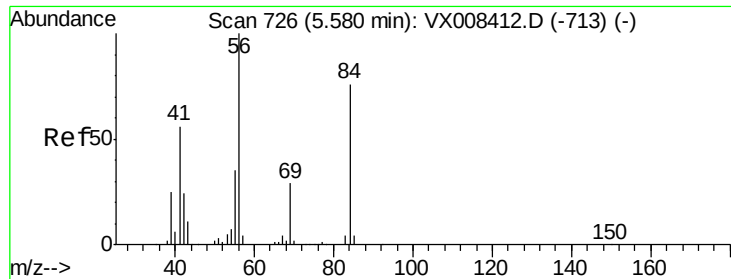


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0



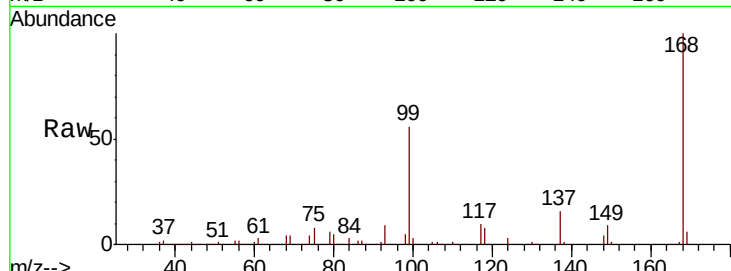




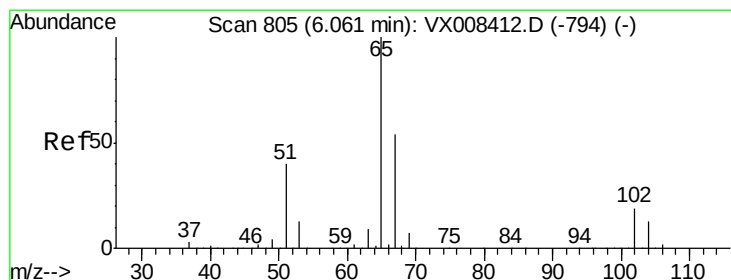
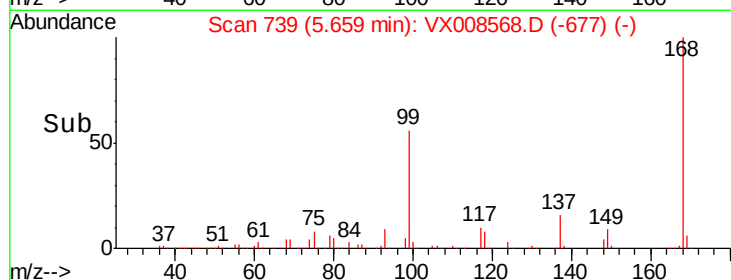
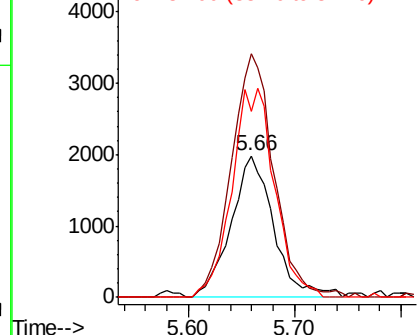
#31  
Cyclohexane  
Concen: 0.984 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. 0.08 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

Instrument :  
MSVOA\_X  
ClientSampleId :  
BP-VPB201R-GW-818-820

Tot Ion: 56 Resp: 5548  
Ion Ratio Lower Upper  
56 100  
69 172.3 23.2 34.8#  
84 131.3 60.7 91.1#

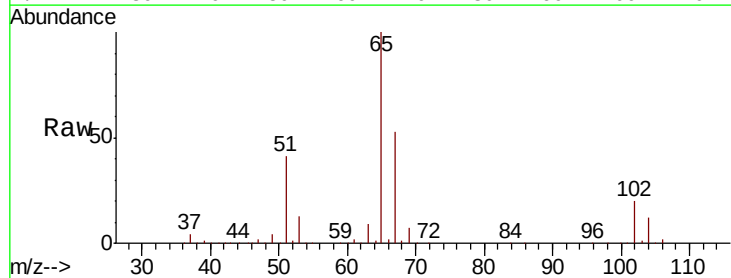


Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

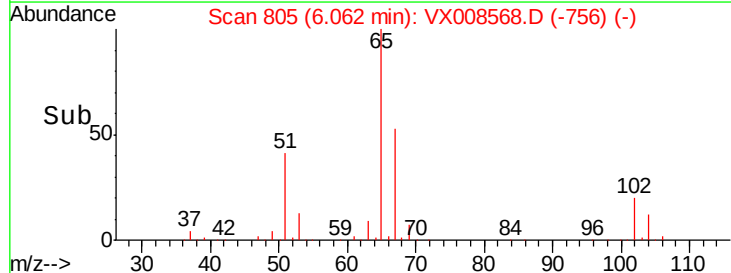
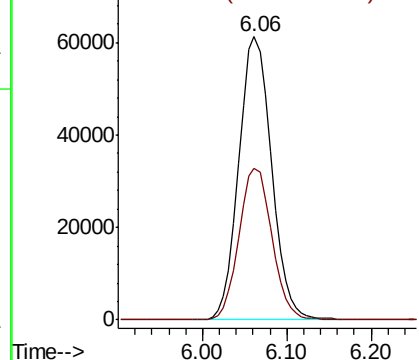


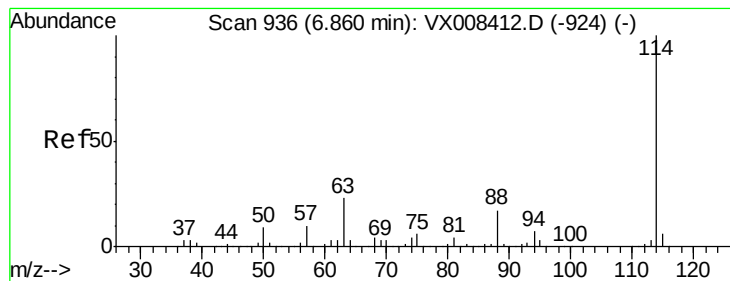
#33  
1,2-Dichloroethane-d4  
Concen: 45.903 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. 0.00 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

Tgt Ion: 65 Resp: 161395  
Ion Ratio Lower Upper  
65 100  
67 53.7 0.0 109.4



Abundance Ion 64.90 (64.60 to 65.60): VX0  
Ion 66.90 (66.60 to 67.60): VX0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. 0.00 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Instrument :

MSVOA\_X

ClientSampleId :

BP-VPB201R-GW-818-820

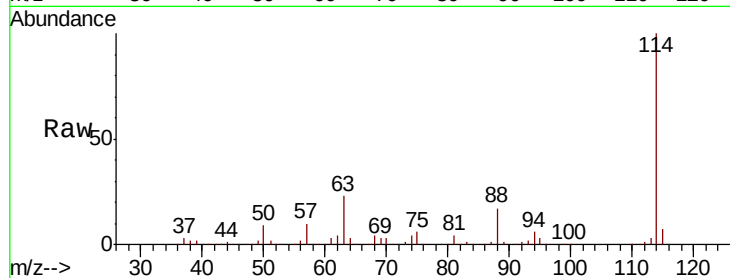
Tot Ion:114 Resp: 387872

Ion Ratio Lower Upper

114 100

63 23.2 0.0 46.4

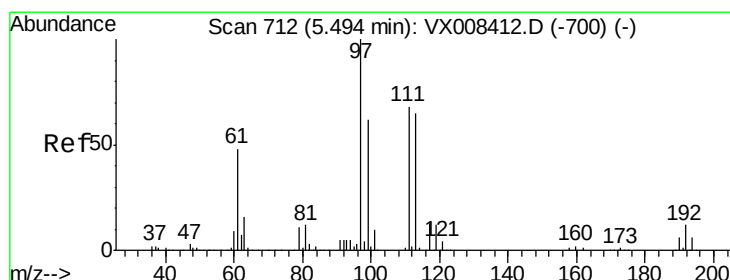
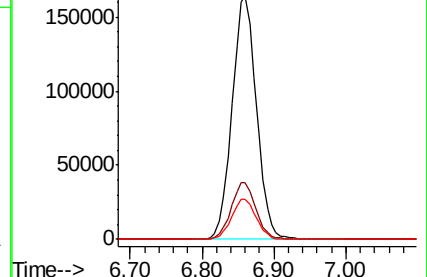
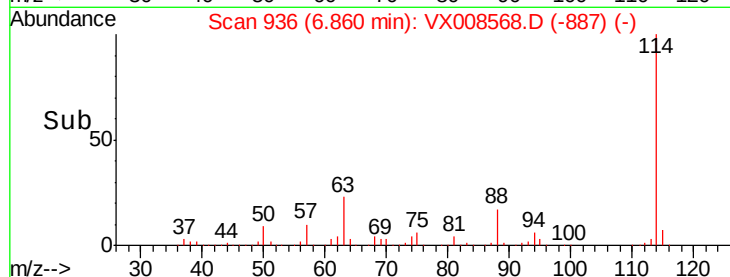
88 16.5 0.0 33.2



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0



#35

Dibromofluoromethane

Concen: 46.754 ug/l

RT: 5.49 min Scan# 712

Delta R.T. 0.00 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

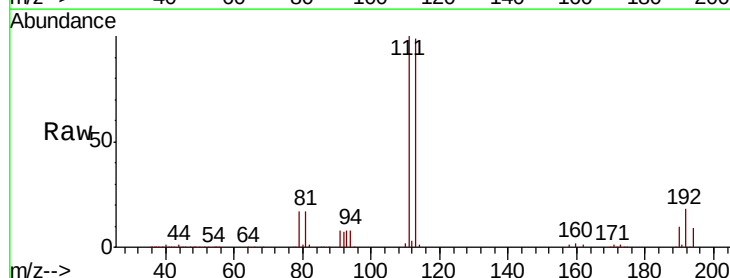
Tgt Ion:113 Resp: 118246

Ion Ratio Lower Upper

113 100

111 103.2 83.0 124.4

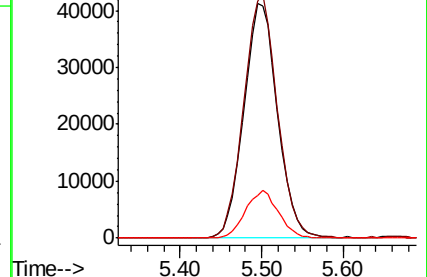
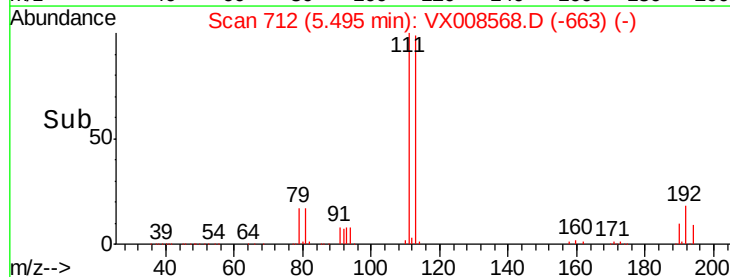
192 19.8 15.6 23.4

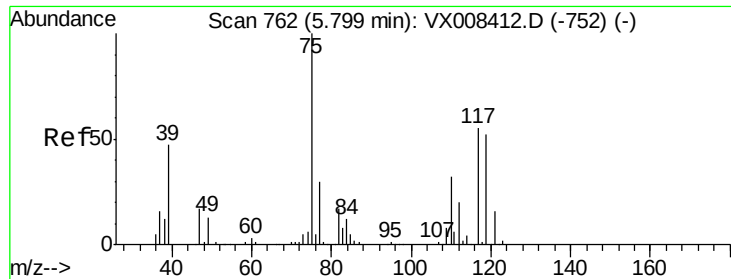


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

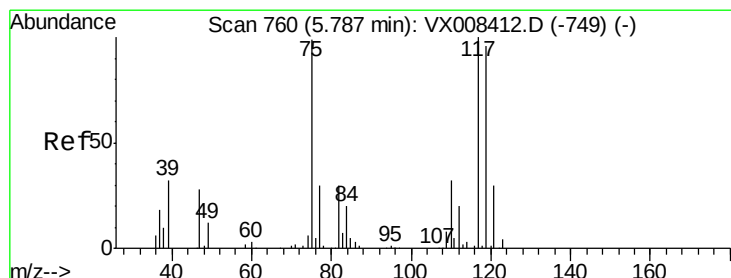
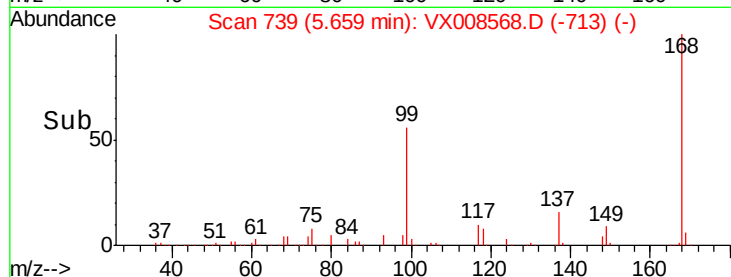
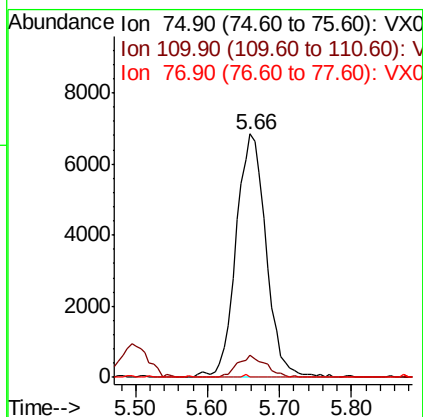
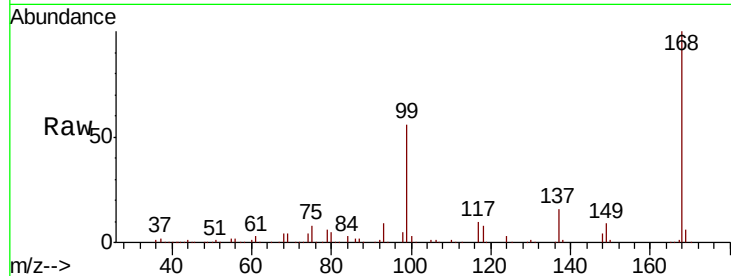




#36  
 1,1-Dichloropropene  
 Concen: 4.784 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX008568.D  
 Acq: 01 Apr 2019 15:00

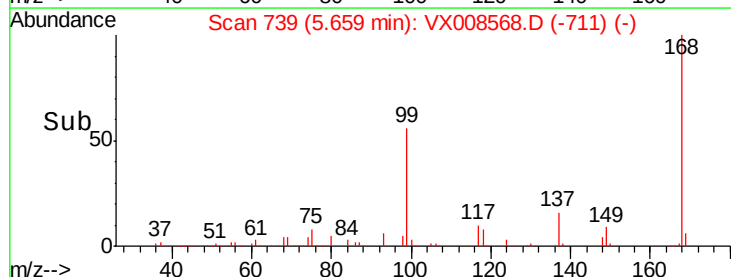
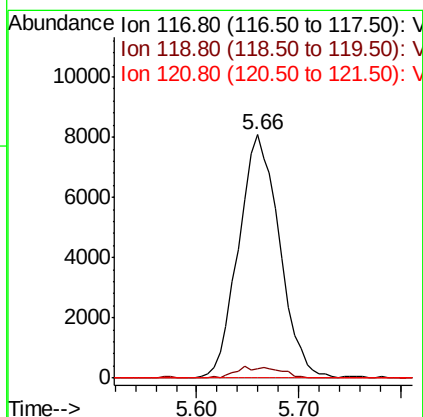
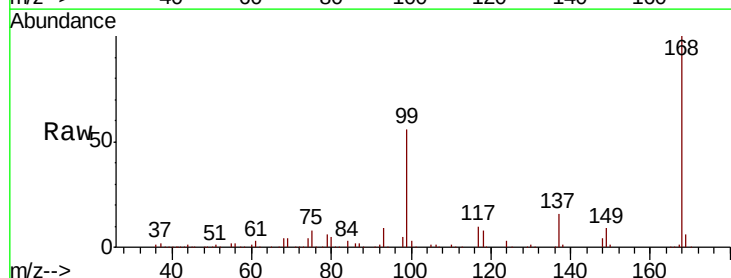
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-VPB201R-GW-818-820

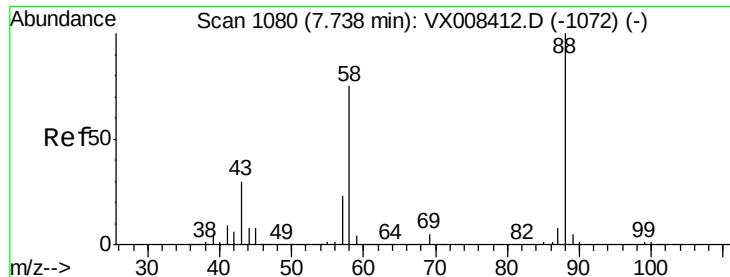
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.7   | 16.6  | 49.7# |
| 77      | 0.1   | 24.2  | 36.2# |



#38  
 Carbon Tetrachloride  
 Concen: 6.524 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.13 min  
 Lab File: VX008568.D  
 Acq: 01 Apr 2019 15:00

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.0   | 76.7  | 115.1# |
| 121     | 0.0   | 24.3  | 36.5#  |

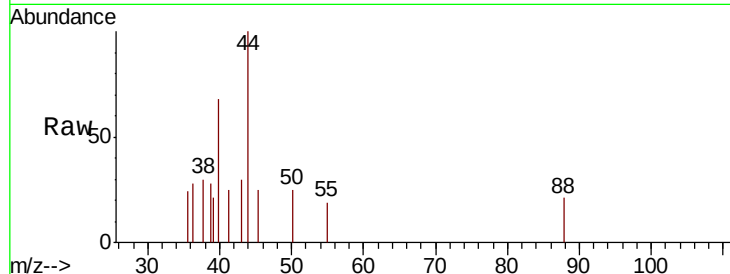




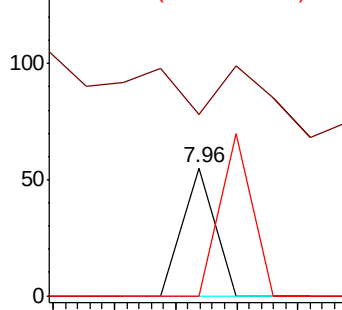
#49  
1,4-Dioxane  
Concen: 0.235 ug/l  
RT: 7.96 min Scan# 1117  
Delta R.T. 0.23 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

Instrument :  
MSVOA\_X  
ClientSampleId :  
BP-VPB201R-GW-818-820

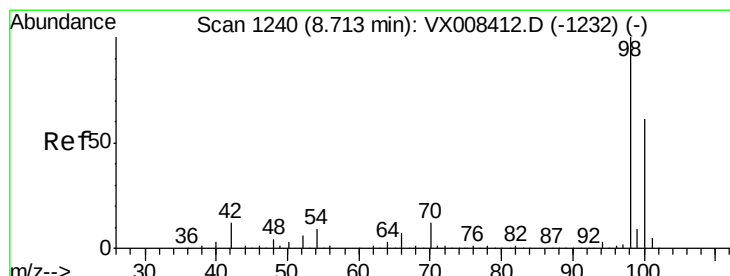
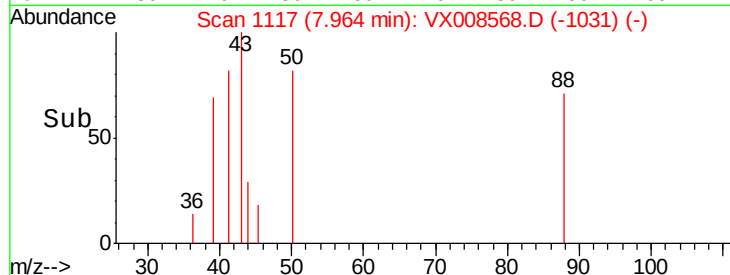
Tot Ion: 88 Resp: 20  
Ion Ratio Lower Upper  
88 100  
43 0.0 28.6 43.0#  
58 130.0 63.0 94.4#



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

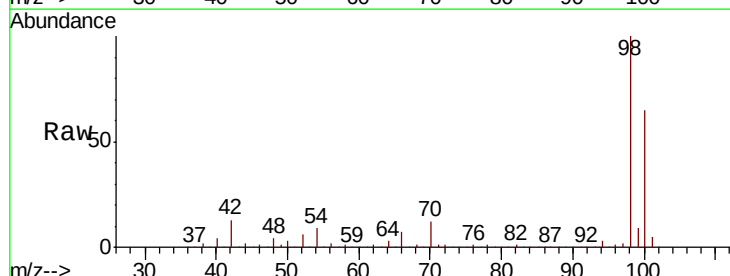


Time--> 7.94 7.95 7.96 7.97 7.98

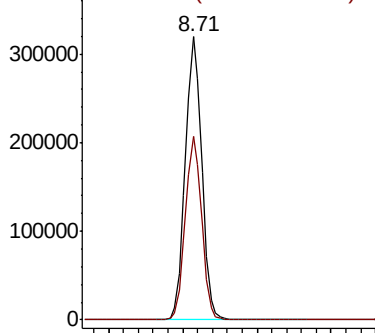


#50  
Toluene-d8  
Concen: 48.153 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

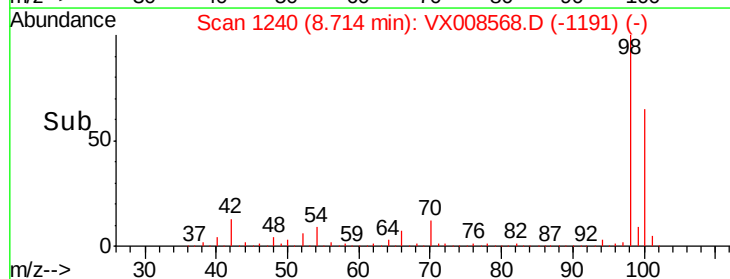
Tgt Ion: 98 Resp: 486969  
Ion Ratio Lower Upper  
98 100  
100 64.2 51.1 76.7

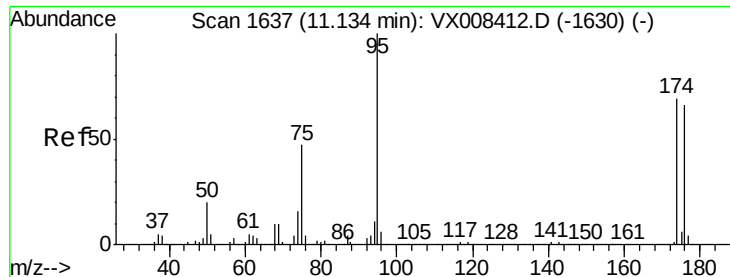


Abundance Ion 98.00 (97.70 to 98.70): VX0  
Ion 100.00 (99.70 to 100.70): VX0



Time--> 8.60 8.70 8.80 8.90

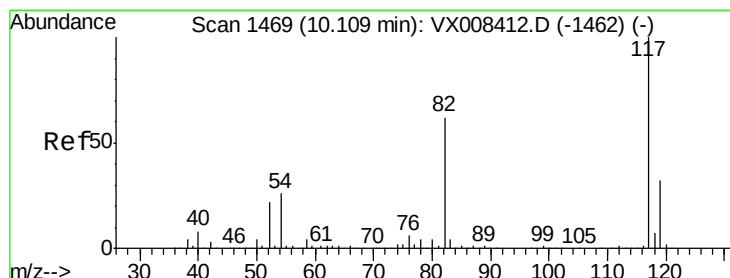
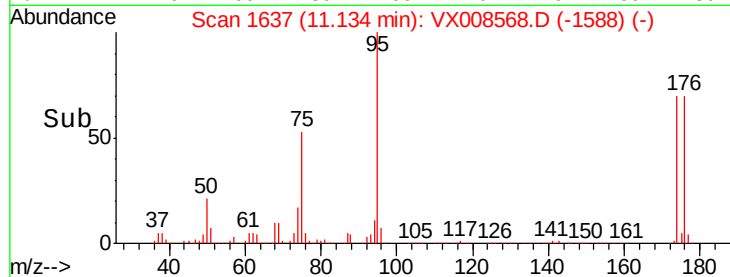
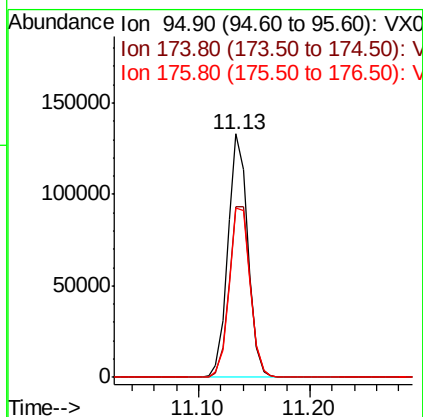
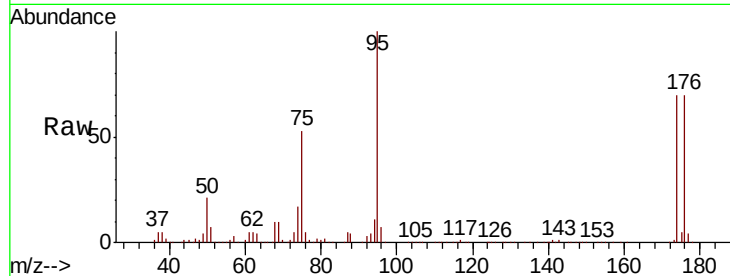




#62  
4-Bromofluorobenzene  
Concen: 43.811 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. 0.00 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

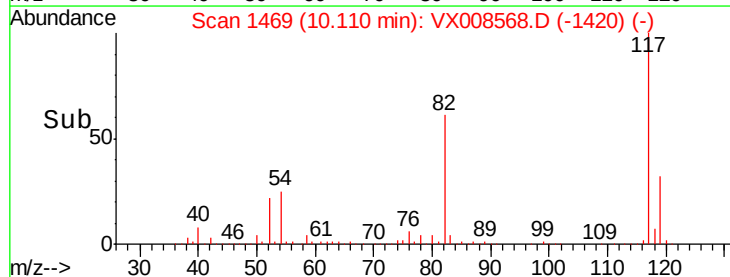
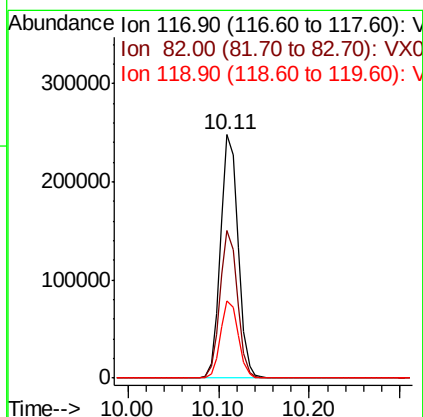
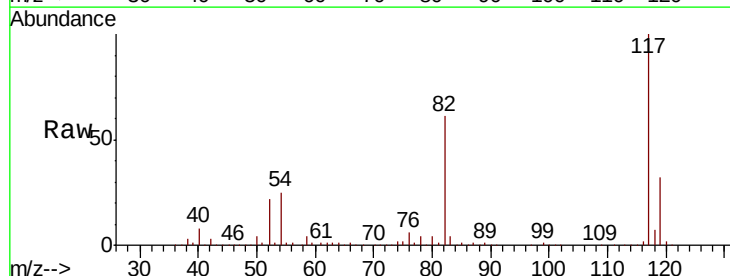
Instrument :  
MSVOA\_X  
ClientSampleId :  
BP-VPB201R-GW-818-820

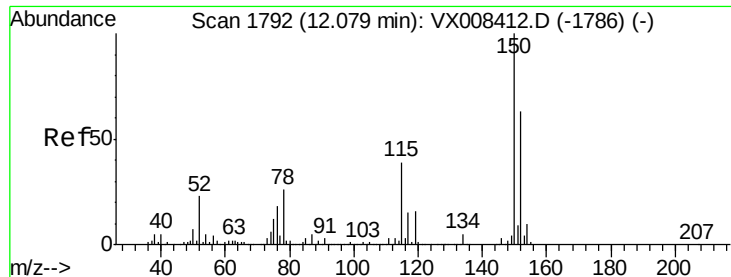
Tot Ion: 95 Resp: 164181  
Ion Ratio Lower Upper  
95 100  
174 74.9 0.0 147.2  
176 73.2 0.0 142.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. 0.00 min  
Lab File: VX008568.D  
Acq: 01 Apr 2019 15:00

Tgt Ion: 117 Resp: 337429  
Ion Ratio Lower Upper  
117 100  
82 60.6 49.4 74.2  
119 31.7 25.4 38.0

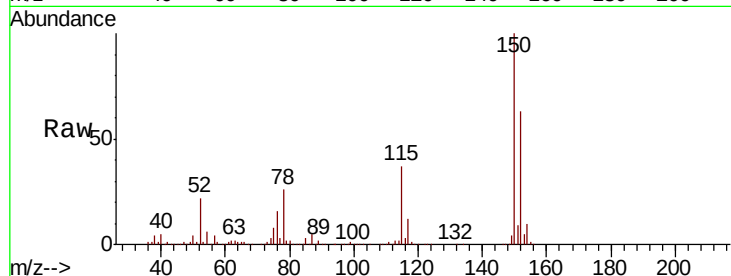




#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 12.08 min Scan# 1792  
 Delta R.T. 0.00 min  
 Lab File: VX008568.D  
 Acq: 01 Apr 2019 15:00

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 BP-VPB201R-GW-818-820

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 61.6  | 43.5  | 130.5 |
| 150     | 158.1 | 0.0   | 348.8 |

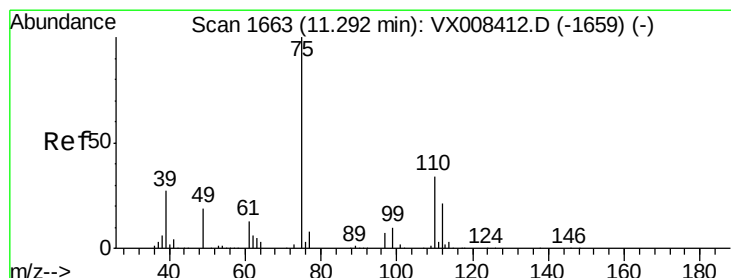
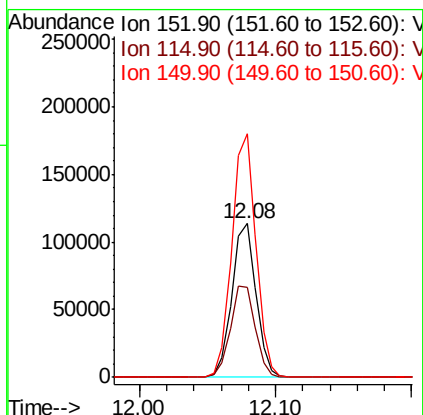
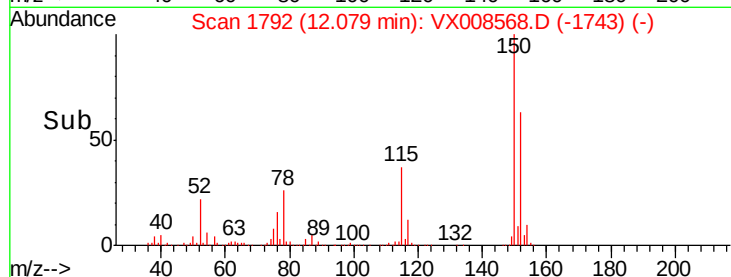


Abundance

Ion 151.90 (151.60 to 152.60): V

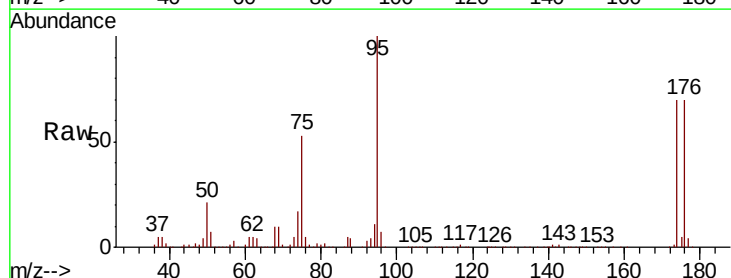
Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76  
 1,2,3-Trichloropropane  
 Concen: 20.139 ug/l  
 RT: 11.13 min Scan# 1637  
 Delta R.T. -0.16 min  
 Lab File: VX008568.D  
 Acq: 01 Apr 2019 15:00

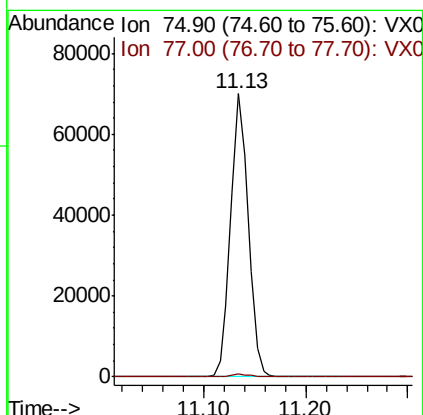
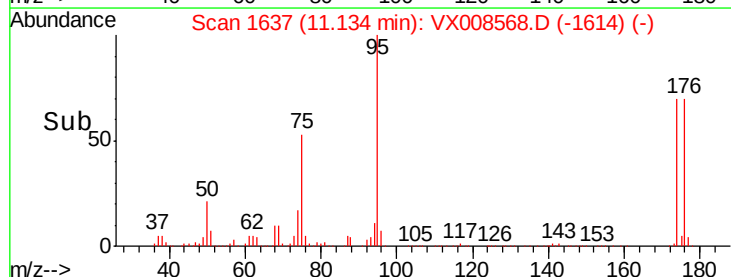
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.3   | 21.9  | 65.7  |

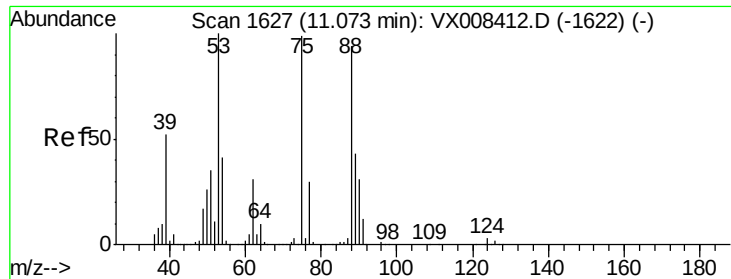


Abundance

Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 64.502 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008568.D

Acq: 01 Apr 2019 15:00

Instrument :

MSVOA\_X

ClientSampleId :

BP-VPB201R-GW-818-820

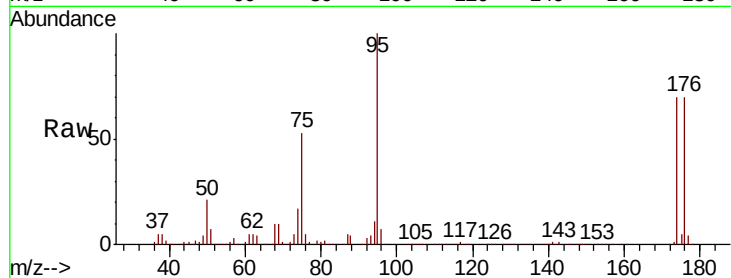
Tot Ion: 75 Resp: 83813

Ion Ratio Lower Upper

75 100

53 0.2 82.1 123.1#

89 0.0 34.6 52.0#



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

