

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX100418\  
 Data File : VX005047.D  
 Acq On : 05 Oct 2018 04:57  
 Operator : JC/MD  
 Sample : J5233-01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 85 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Oct 05 05:22:24 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Oct 03 04:00:03 2018  
 Response via : Initial Calibration

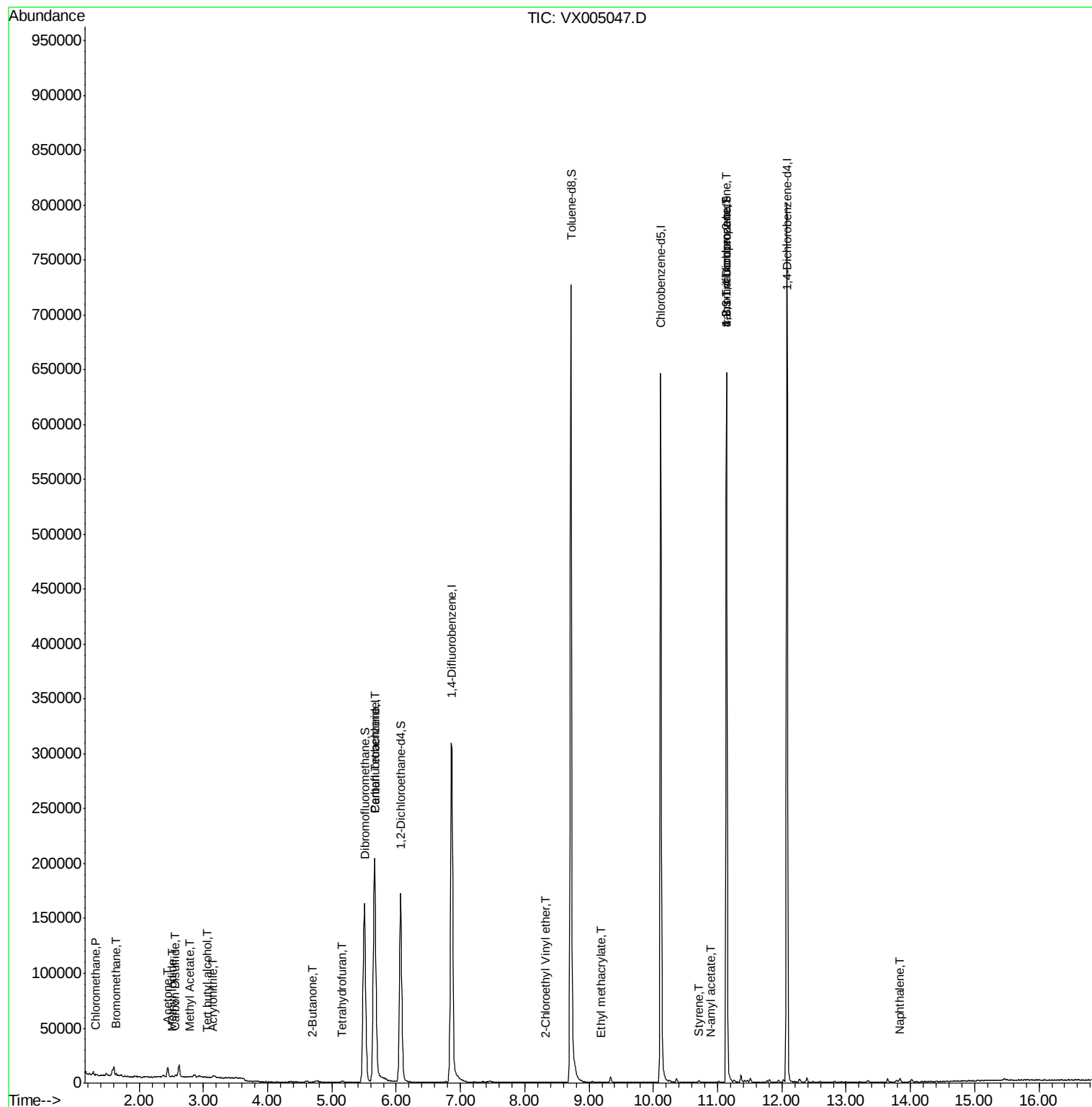
| Internal Standards             | R.T.   | QIon | Response | Conc      | Units   | Dev(Min) |
|--------------------------------|--------|------|----------|-----------|---------|----------|
| 1) Pentafluorobenzene          | 5.67   | 168  | 208567   | 50.00     | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene        | 6.87   | 114  | 332818   | 50.00     | ug/l    | 0.00     |
| 63) Chlorobenzene-d5           | 10.12  | 117  | 319245   | 50.00     | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 12.08  | 152  | 168001   | 50.00     | ug/l    | 0.00     |
| System Monitoring Compounds    |        |      |          |           |         |          |
| 33) 1,2-Dichloroethane-d4      | 6.07   | 65   | 160159   | 53.76     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 107.52% |          |
| 35) Dibromofluoromethane       | 5.51   | 113  | 137575   | 48.77     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 97.54%  |          |
| 50) Toluene-d8                 | 8.72   | 98   | 478527   | 51.03     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 102.06% |          |
| 62) 4-Bromofluorobenzene       | 11.14  | 95   | 163728   | 48.47     | ug/l    | 0.00     |
| Spiked Amount                  | 50.000 |      | Recovery | =         | 96.94%  |          |
| Target Compounds               |        |      |          |           |         |          |
|                                |        |      |          |           | Qvalue  |          |
| 3) Chloromethane               | 1.32   | 50   | 861      | 0.250     | ug/l #  | 86       |
| 5) Bromomethane                | 1.64   | 94   | 973      | 0.507     | ug/l #  | 73       |
| 6) Chloroethane                | 1.75   | 64   | 218      | Below Cal | #       | 45       |
| 10) Methyl Iodide              | 2.52   | 142  | 1077     | 0.353     | ug/l #  | 83       |
| 11) Tert butyl alcohol         | 3.06   | 59   | 405      | 0.486     | ug/l #  | 85       |
| 15) Acrylonitrile              | 3.15   | 53   | 932      | 0.508     | ug/l #  | 77       |
| 16) Acetone                    | 2.45   | 43   | 9626     | 5.534     | ug/l    | 97       |
| 17) Carbon Disulfide           | 2.57   | 76   | 2364     | 0.348     | ug/l #  | 94       |
| 18) Methyl Acetate             | 2.78   | 43   | 885      | 0.201     | ug/l #  | 89       |
| 20) Methylene Chloride         | 2.85   | 84   | 1121     | Below Cal |         | 87       |
| 25) 2-Butanone                 | 4.70   | 43   | 891      | 0.348     | ug/l    | 92       |
| 29) Tetrahydrofuran            | 5.16   | 42   | 899      | 0.564     | ug/l #  | 90       |
| 38) Carbon Tetrachloride       | 5.67   | 117  | 18839    | 4.657     | ug/l #  | 18       |
| 56) Ethyl methacrylate         | 9.18   | 69   | 42       | 2.870     | ug/l #  | 1        |
| 58) 2-Chloroethyl Vinyl ether  | 8.32   | 63   | 51       | 14.261    | ug/l #  | 49       |
| 70) Styrene                    | 10.71  | 104  | 377      | 2.182     | ug/l #  | 77       |
| 74) N-amyl acetate             | 10.90  | 43   | 196      | 1.780     | ug/l #  | 57       |
| 76) 1,2,3-Trichloropropane     | 11.14  | 75   | 81957    | 21.765    | ug/l #  | 35       |
| 80) 1,3,5-Trimethylbenzene     | 11.51  | 105  | 833      | Below Cal |         | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.14  | 75   | 81957    | 58.990    | ug/l #  | 10       |
| 84) 1,2,4-Trimethylbenzene     | 11.81  | 105  | 1243     | Below Cal |         | 94       |
| 95) Naphthalene                | 13.83  | 128  | 2055     | 0.864     | ug/l    | 98       |

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

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Sample : J5233-01  
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Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Oct 05 05:22:24 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
Quant Title : SW846 8260  
QLast Update : Wed Oct 03 04:00:03 2018  
Response via : Initial Calibration

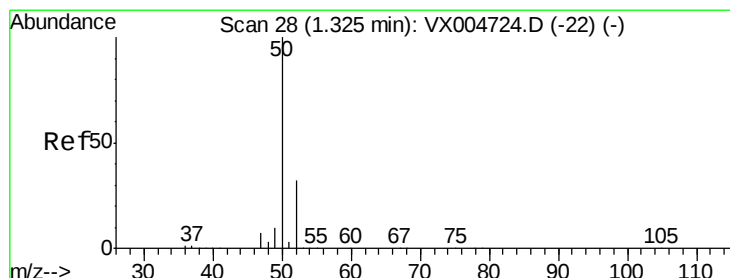
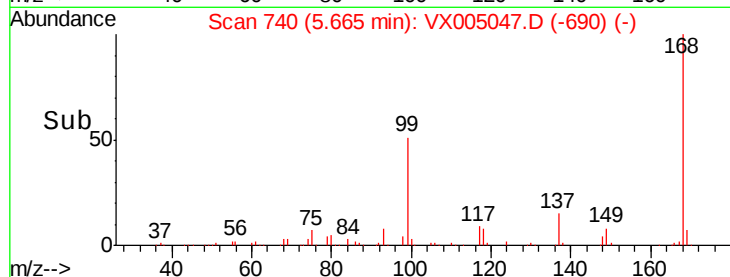
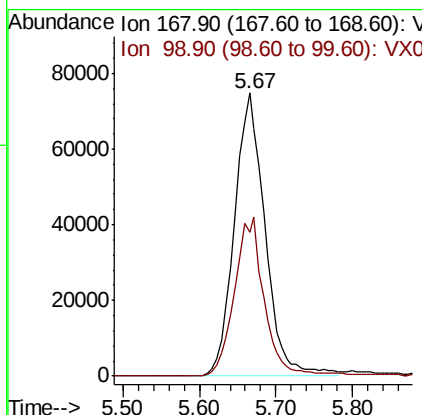
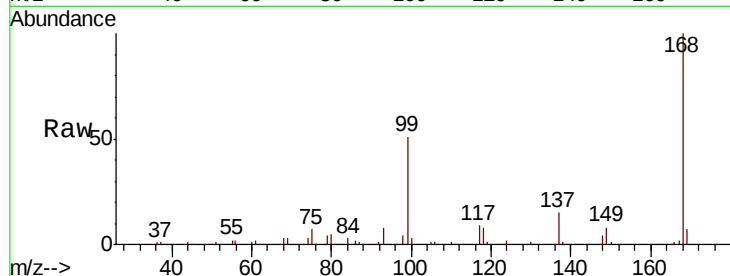




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. 0.01 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

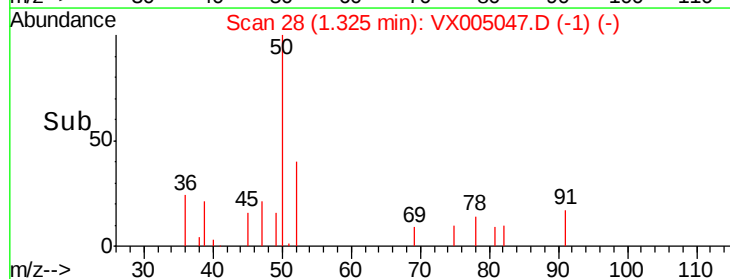
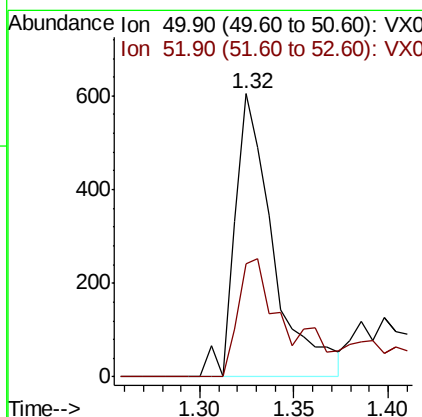
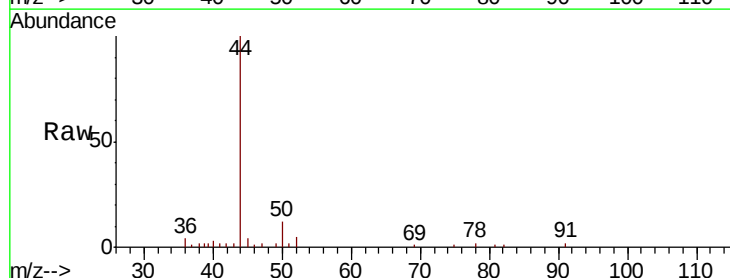
Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:168 Resp: 208567  
Ion Ratio Lower Upper  
168 100  
99 50.8 39.3 58.9



#3  
Chloromethane  
Concen: 0.250 ug/l  
RT: 1.32 min Scan# 28  
Delta R.T. 0.00 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Tgt Ion: 50 Resp: 861  
Ion Ratio Lower Upper  
50 100  
52 39.9 25.8 38.6#





#5

Bromomethane

Concen: 0.507 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

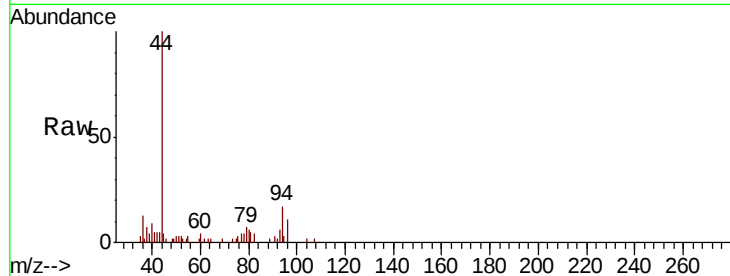
Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 94 Resp: 973

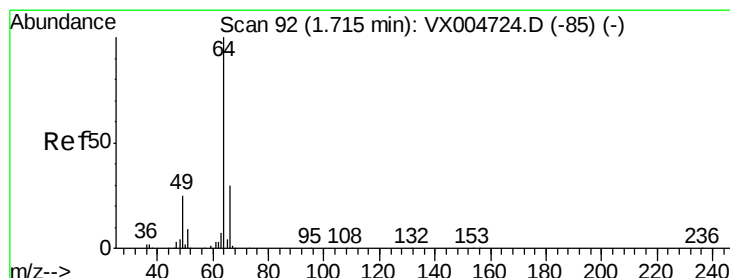
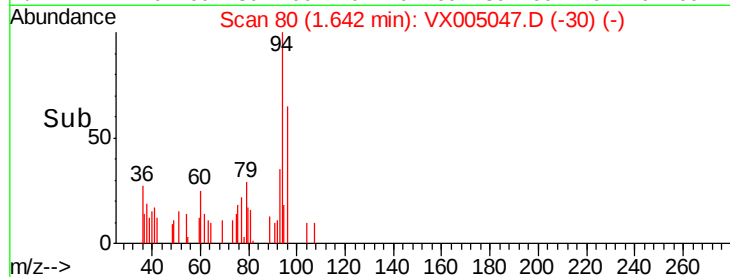
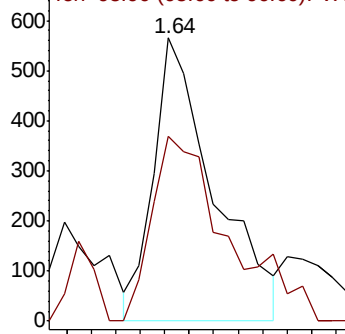
Ion Ratio Lower Upper

94 100

96 73.0 79.5 119.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0  
Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: Below Cal

RT: 1.75 min Scan# 97

Delta R.T. 0.03 min

Lab File: VX005047.D

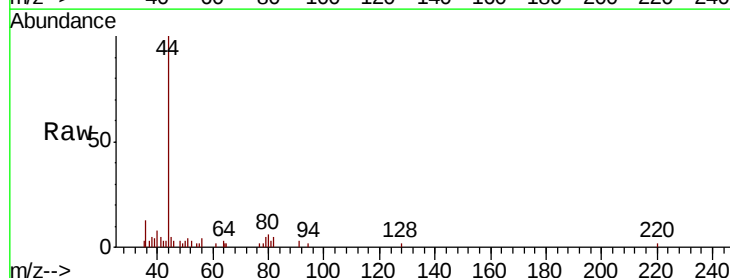
Acq: 05 Oct 2018 04:57

Tgt Ion: 64 Resp: 218

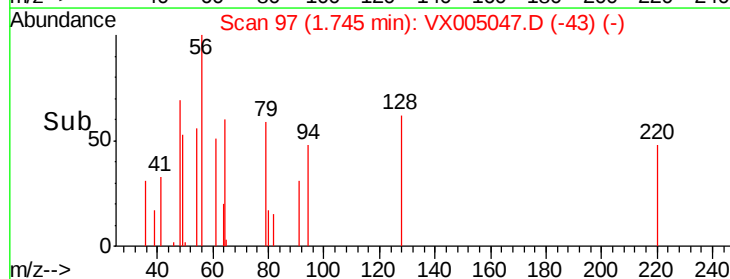
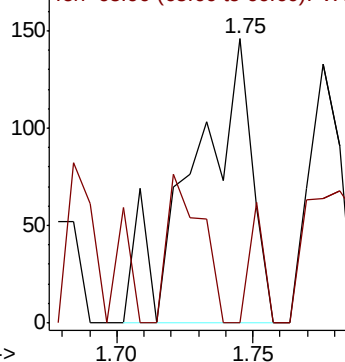
Ion Ratio Lower Upper

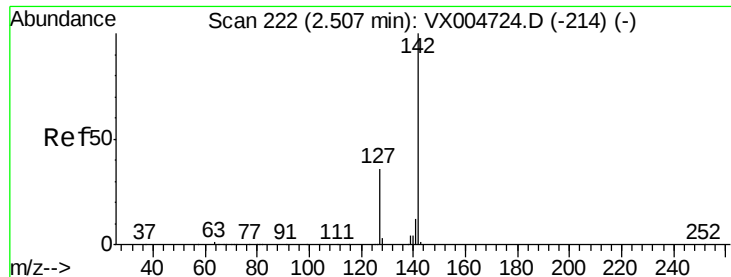
64 100

66 0.0 23.8 35.6#



Abundance Ion 63.90 (63.60 to 64.60): VX0  
Ion 65.90 (65.60 to 66.60): VX0

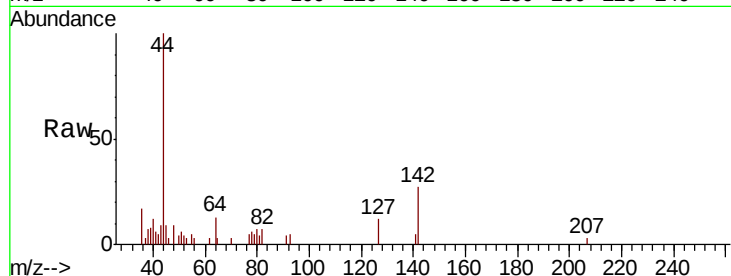




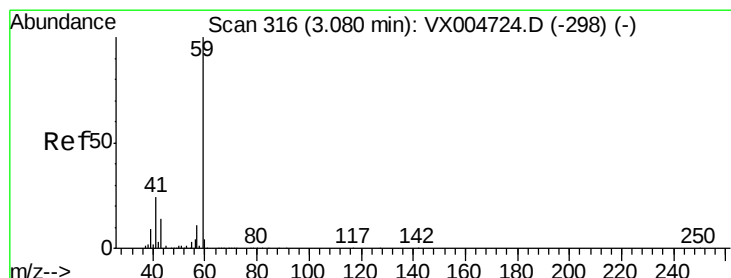
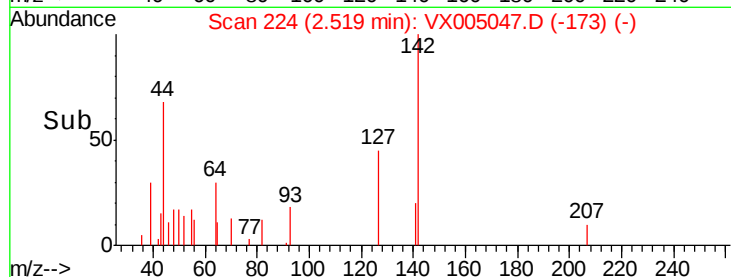
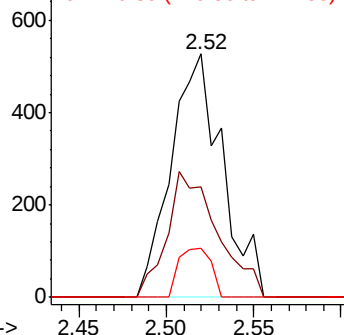
#10  
Methvl Iodide  
Concen: 0.353 ug/l  
RT: 2.52 min Scan# 224  
Delta R.T. 0.01 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion:142 Resp: 1077  
Ion Ratio Lower Upper  
142 100  
127 51.2 30.1 45.1#  
141 12.7 10.1 15.1

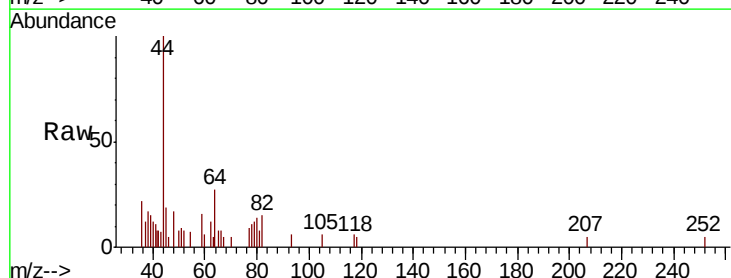


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

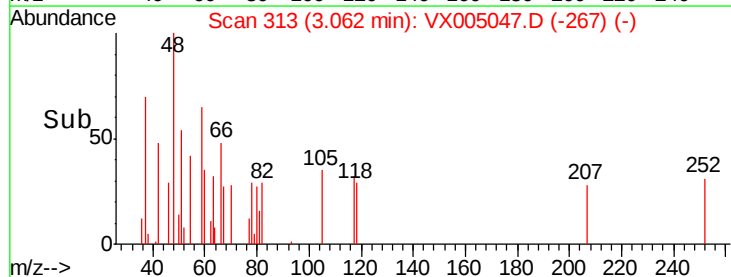
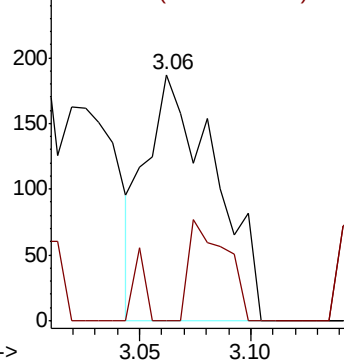


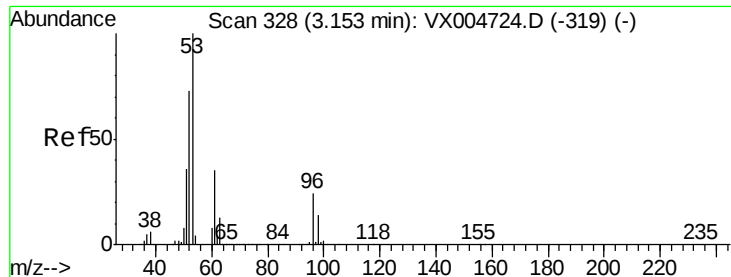
#11  
Tert butyl alcohol  
Concen: 0.486 ug/l  
RT: 3.06 min Scan# 313  
Delta R.T. -0.02 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Tgt Ion: 59 Resp: 405  
Ion Ratio Lower Upper  
59 100  
57 4.9 8.6 12.8#



Abundance Ion 59.00 (58.70 to 59.70): VX0  
Ion 57.00 (56.70 to 57.70): VX0





#15

Acrylonitrile

Concen: 0.508 ug/l

RT: 3.15 min Scan# 327

Delta R.T. -0.01 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

Instrument :

MSVOA\_X

ClientSampled :

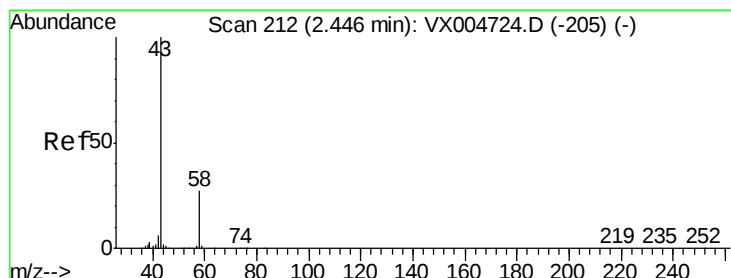
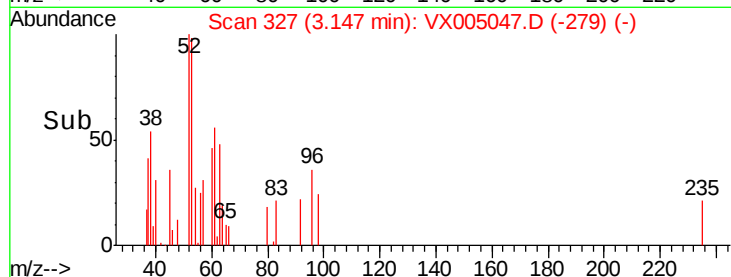
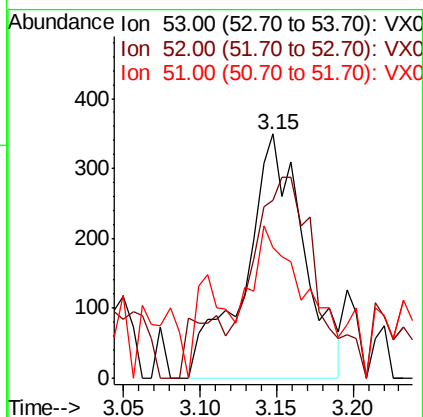
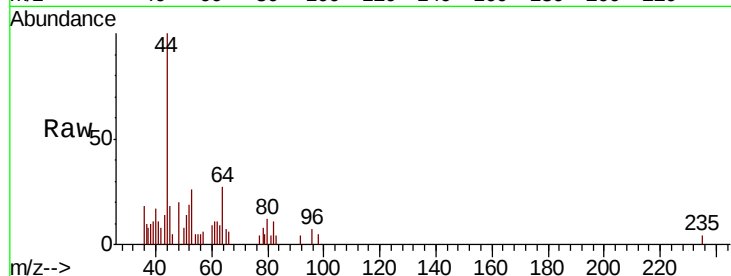
Tot Ion: 53 Resp: 932

Ion Ratio Lower Upper

53 100

52 87.4 63.0 94.4

51 65.7 28.6 42.8#



#16

Acetone

Concen: 5.534 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX005047.D

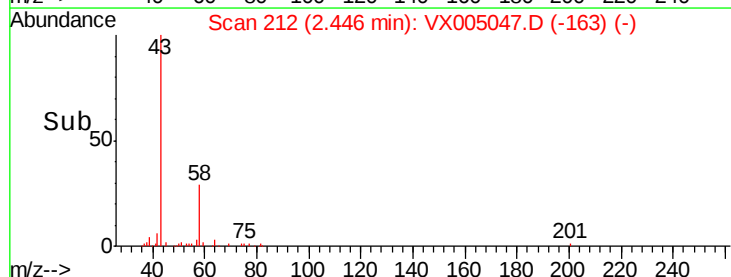
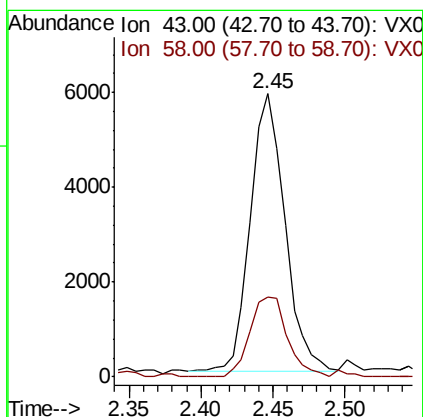
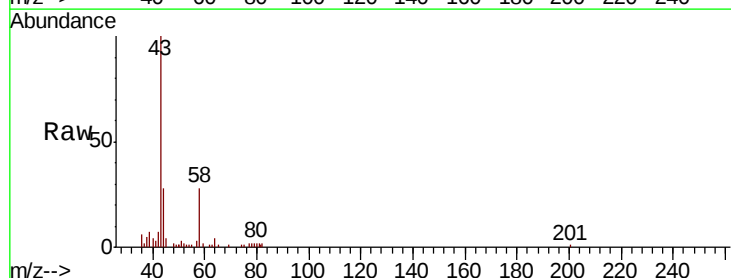
Acq: 05 Oct 2018 04:57

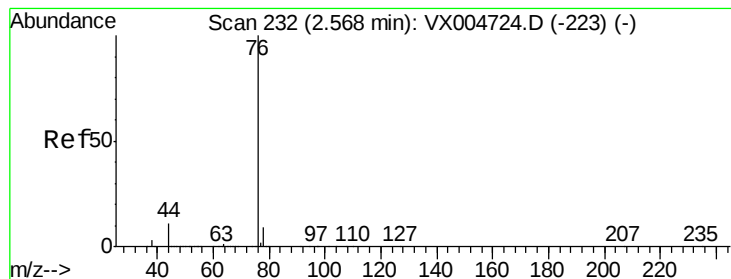
Tgt Ion: 43 Resp: 9626

Ion Ratio Lower Upper

43 100

58 28.7 21.8 32.6





#17

Carbon Disulfide

Concen: 0.348 ug/l

RT: 2.57 min Scan# 232

Delta R.T. 0.00 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

Instrument :

MSVOA\_X

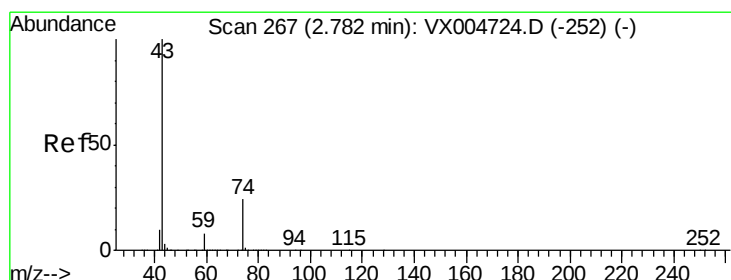
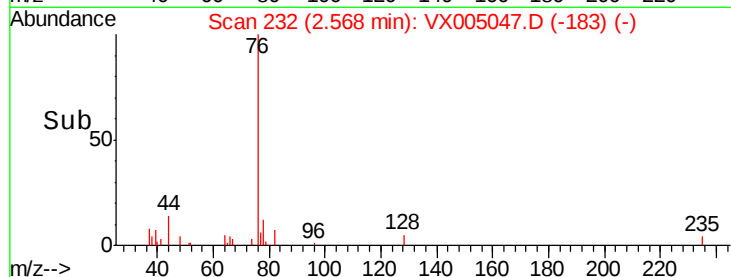
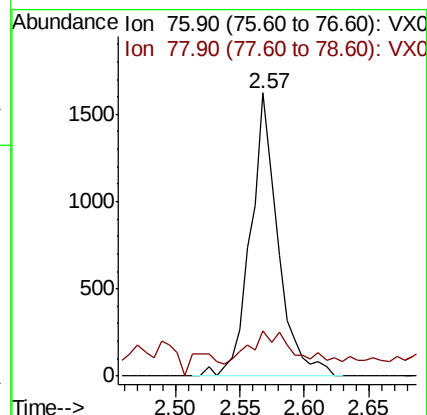
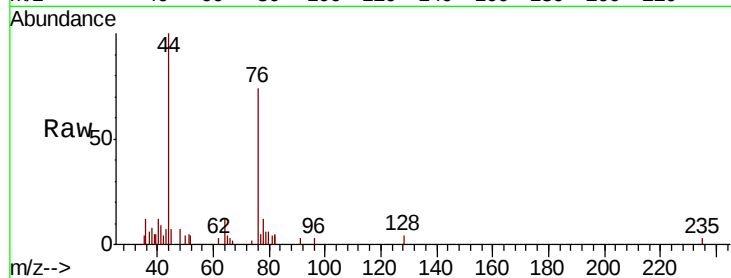
ClientSampleId :

Tot Ion: 76 Resp: 2364

Ion Ratio Lower Upper

76 100

78 11.0 7.0 10.6#



#18

Methyl Acetate

Concen: 0.201 ug/l

RT: 2.78 min Scan# 267

Delta R.T. 0.00 min

Lab File: VX005047.D

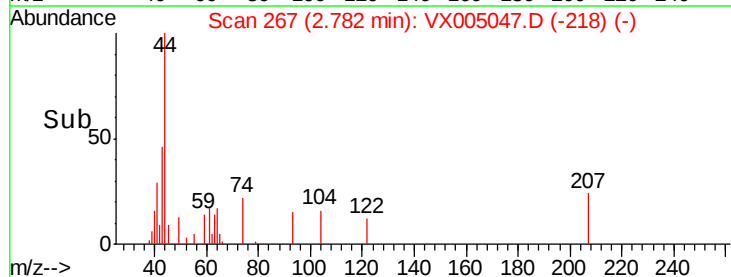
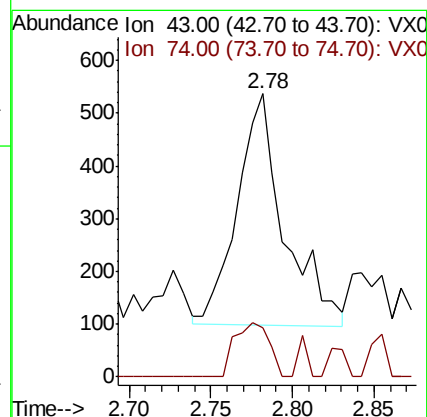
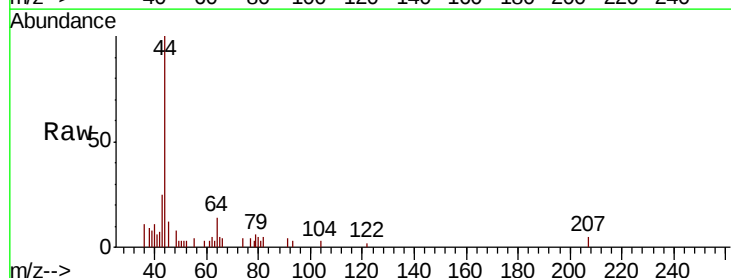
Acq: 05 Oct 2018 04:57

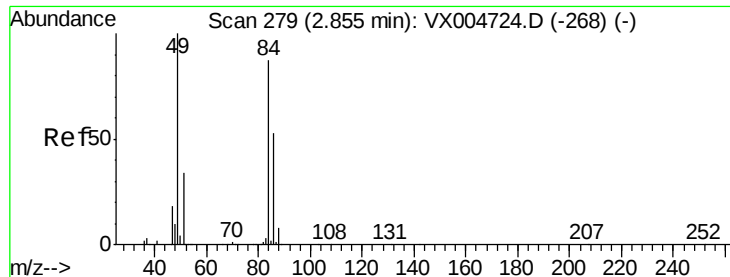
Tgt Ion: 43 Resp: 885

Ion Ratio Lower Upper

43 100

74 17.2 17.8 26.8#

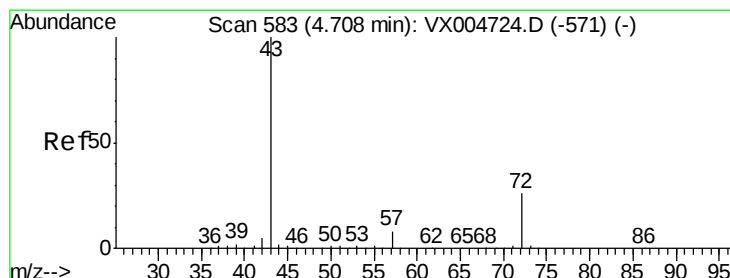
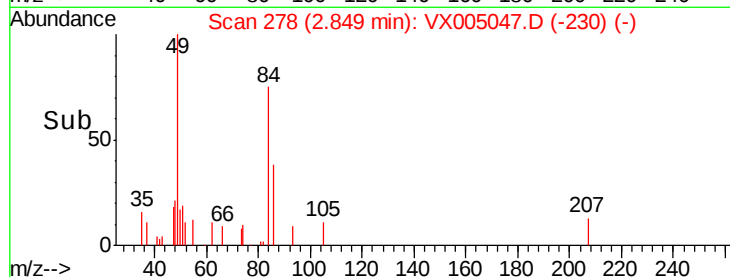
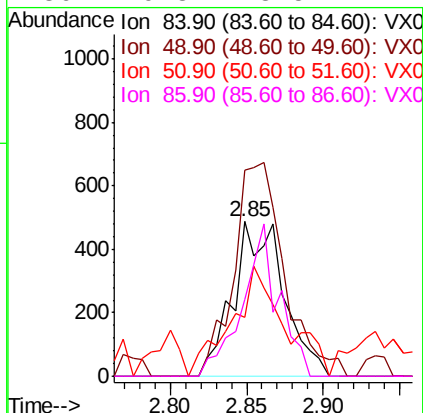
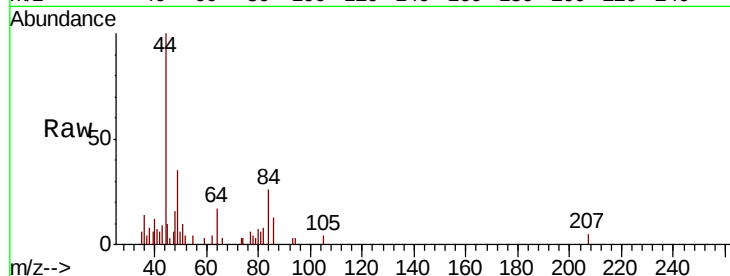




#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.85 min Scan# 278  
Delta R.T. -0.01 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

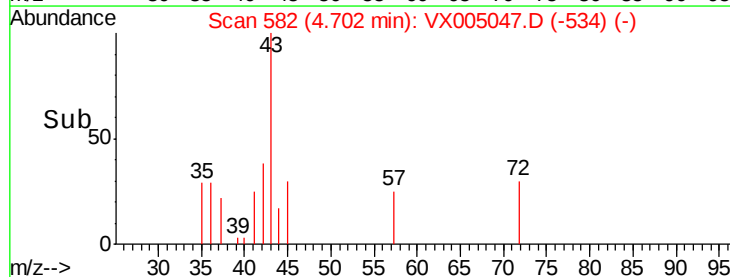
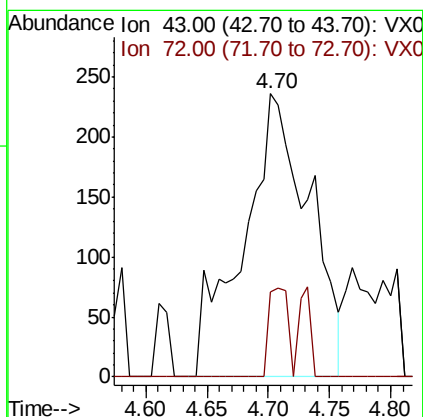
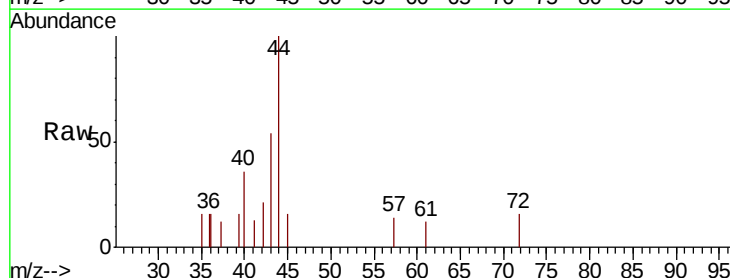
Instrument :  
MSVOA\_X  
ClientSampled :

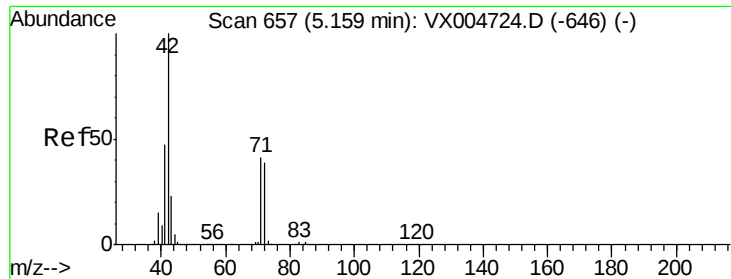
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 1121  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 132.8 | 92.3  | 138.5 |
| 51       | 37.7  | 31.8  | 47.6  |
| 86       | 49.8  | 48.5  | 72.7  |



#25  
2-Butanone  
Concen: 0.348 ug/l  
RT: 4.70 min Scan# 582  
Delta R.T. -0.01 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 891   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 30.1  | 20.8  | 31.2  |

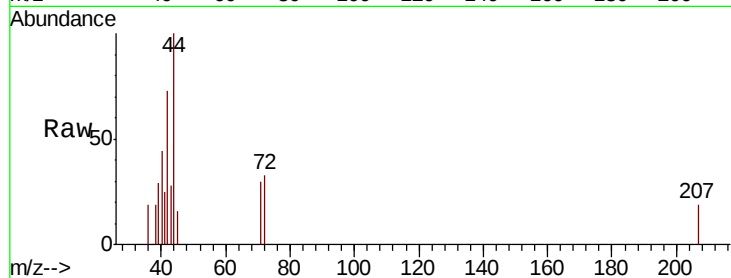




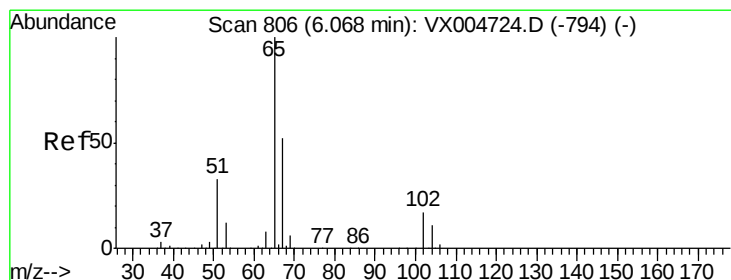
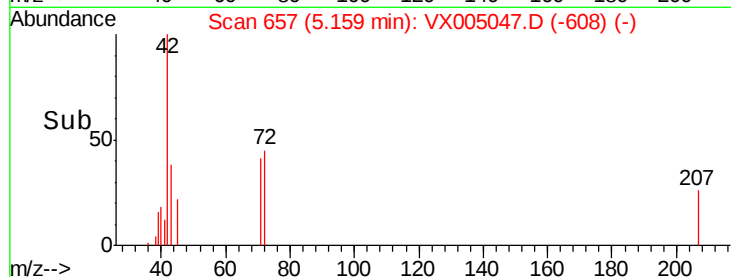
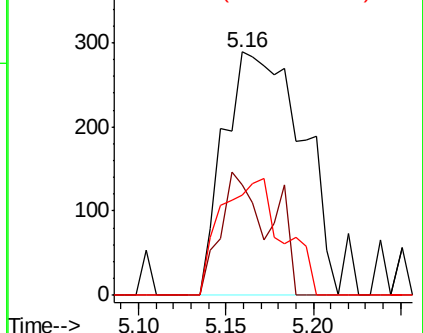
#29  
Tetrahydrofuran  
Concen: 0.564 ug/l  
RT: 5.16 min Scan# 657  
Delta R.T. 0.00 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 42 Resp: 899  
Ion Ratio Lower Upper  
42 100  
72 32.1 33.7 50.5#  
71 38.0 32.2 48.4

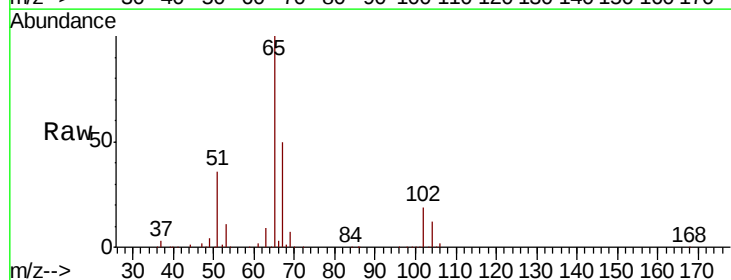


Abundance Ion 42.00 (41.70 to 42.70): VX0  
Ion 72.00 (71.70 to 72.70): VX0  
Ion 71.00 (70.70 to 71.70): VX0

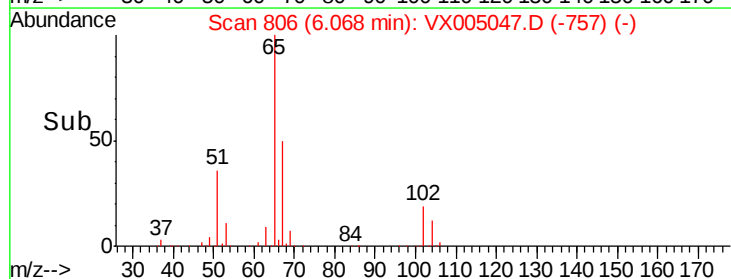
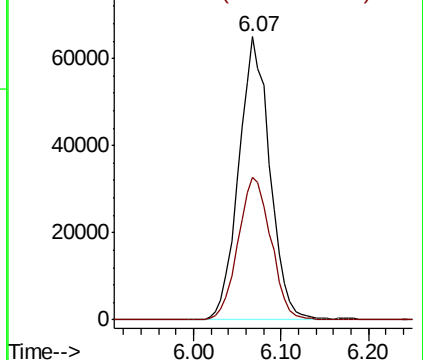


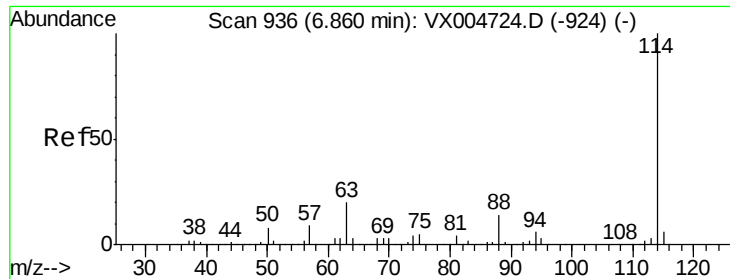
#33  
1,2-Dichloroethane-d4  
Concen: 53.756 ug/l  
RT: 6.07 min Scan# 806  
Delta R.T. 0.00 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Tgt Ion: 65 Resp: 160159  
Ion Ratio Lower Upper  
65 100  
67 53.7 0.0 107.4



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

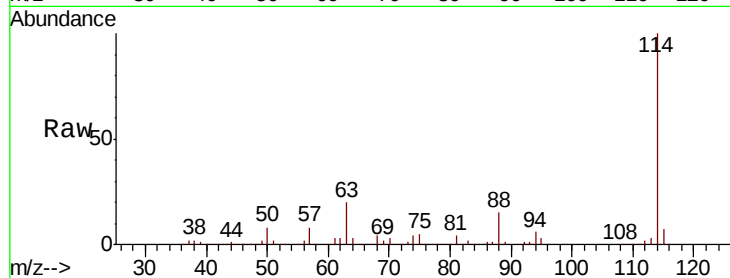




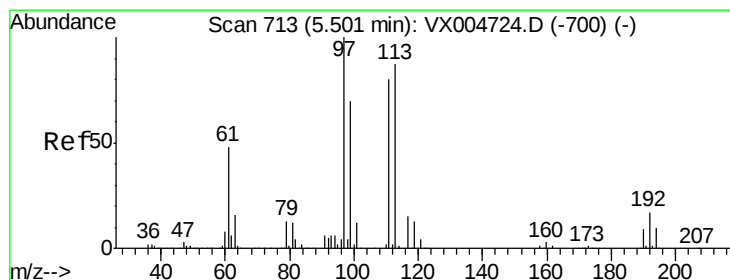
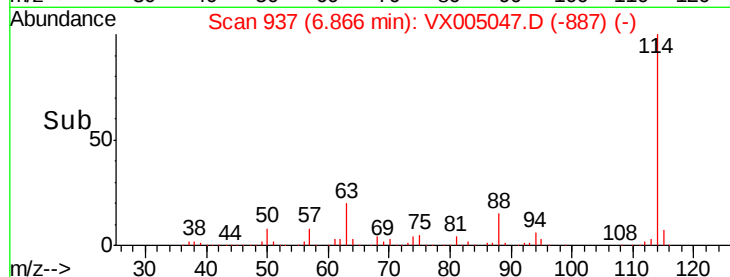
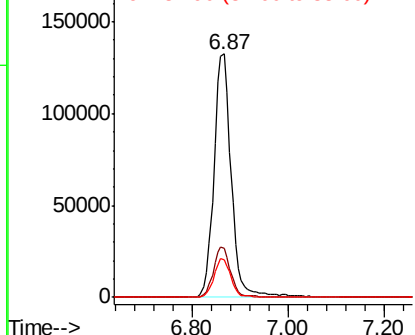
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.87 min Scan# 937  
 Delta R.T. 0.01 min  
 Lab File: VX005047.D  
 Acq: 05 Oct 2018 04:57

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion:114 Resp: 332818  
 Ion Ratio Lower Upper  
 114 100  
 63 20.3 0.0 39.8  
 88 15.2 0.0 27.0

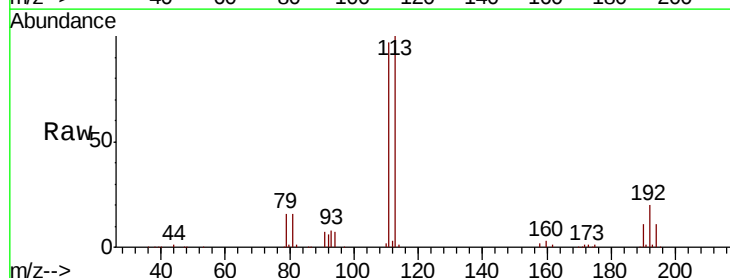


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

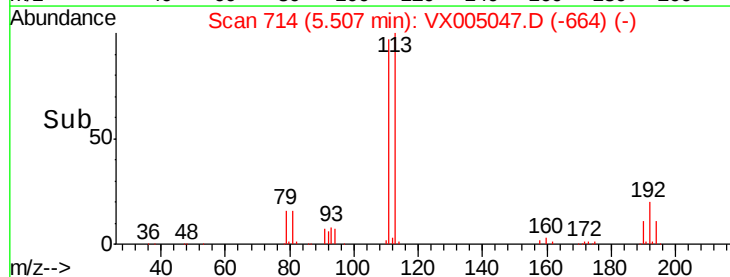
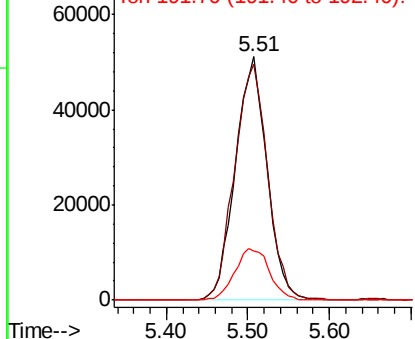


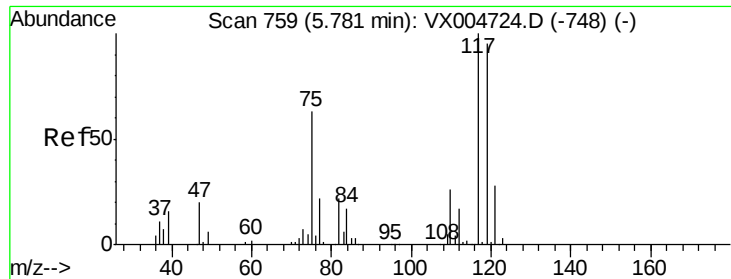
#35  
 Dibromofluoromethane  
 Concen: 48.774 ug/l  
 RT: 5.51 min Scan# 714  
 Delta R.T. 0.01 min  
 Lab File: VX005047.D  
 Acq: 05 Oct 2018 04:57

Tgt Ion:113 Resp: 137575  
 Ion Ratio Lower Upper  
 113 100  
 111 101.5 77.0 115.4  
 192 23.3 17.0 25.6



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





#38

Carbon Tetrachloride

Concen: 4.657 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

Instrument :

MSVOA\_X

ClientSampled :

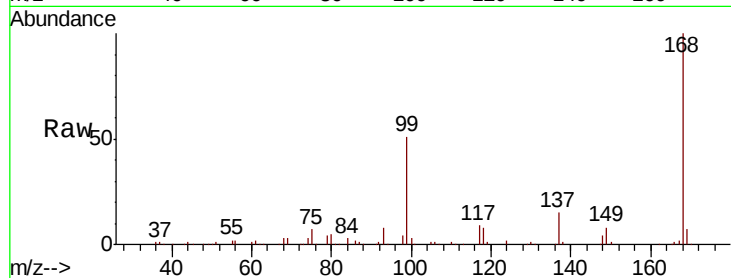
Tot Ion:117 Resp: 18839

Ion Ratio Lower Upper

117 100

119 6.6 75.2 112.8#

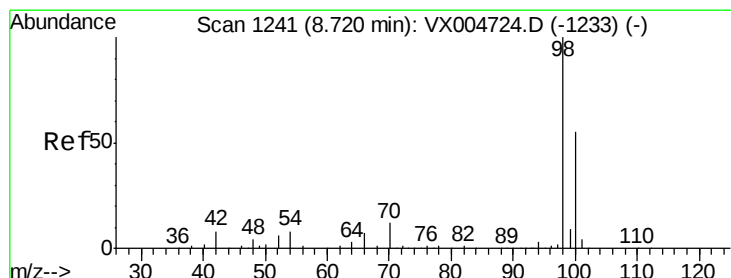
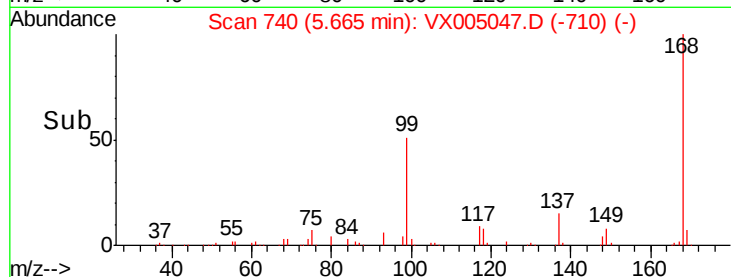
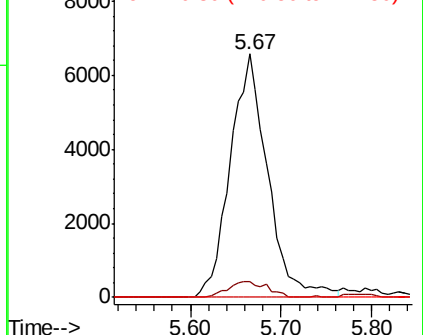
121 0.0 22.5 33.7#



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: 51.030 ug/l

RT: 8.72 min Scan# 1241

Delta R.T. 0.00 min

Lab File: VX005047.D

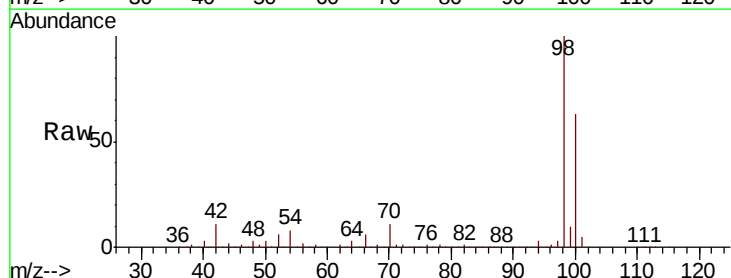
Acq: 05 Oct 2018 04:57

Tgt Ion: 98 Resp: 478527

Ion Ratio Lower Upper

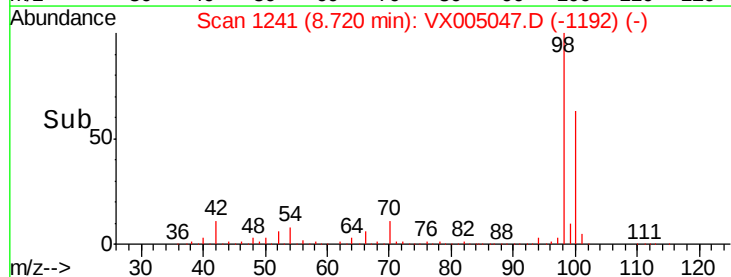
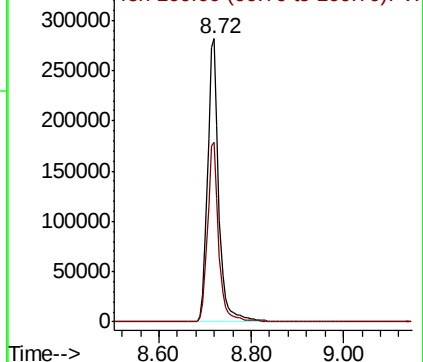
98 100

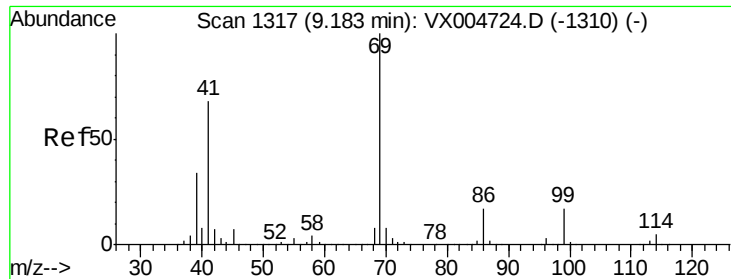
100 63.2 51.9 77.9



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

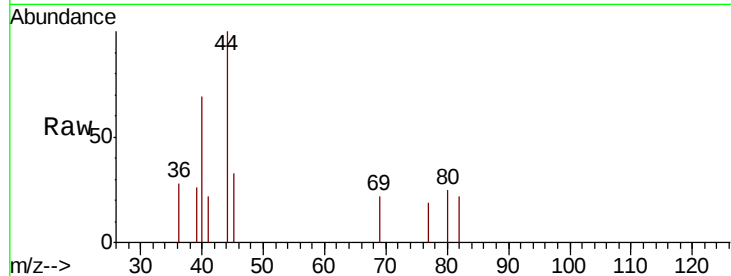




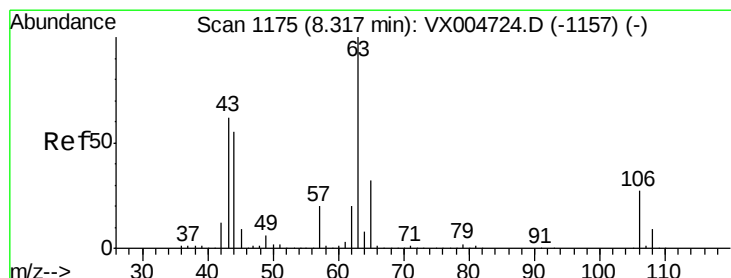
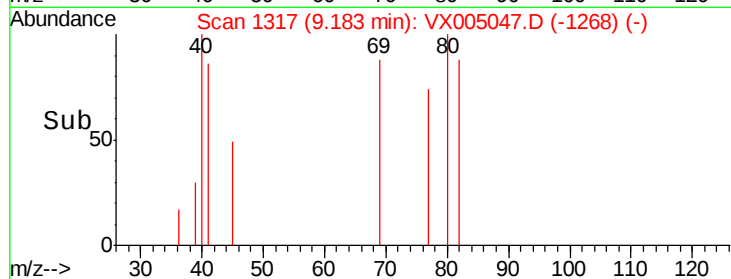
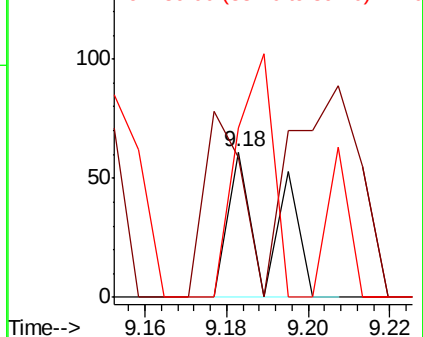
#56  
Ethyl methacrylate  
Concen: 2.870 ug/l  
RT: 9.18 min Scan# 1317  
Delta R.T. 0.00 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion: 69 Resp: 42  
Ion Ratio Lower Upper  
69 100  
41 119.0 56.9 85.3#  
39 150.0 28.4 42.6#

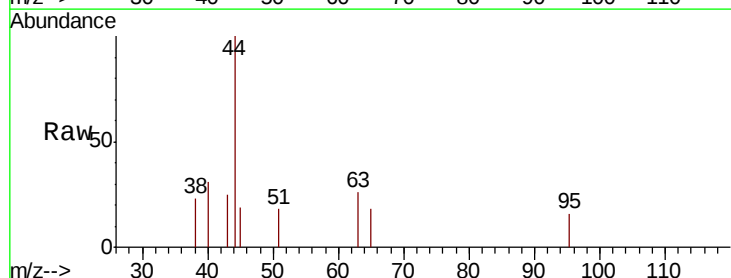


Abundance Ion 69.00 (68.70 to 69.70): VX0  
Ion 41.00 (40.70 to 41.70): VX0  
Ion 39.00 (38.70 to 39.70): VX0

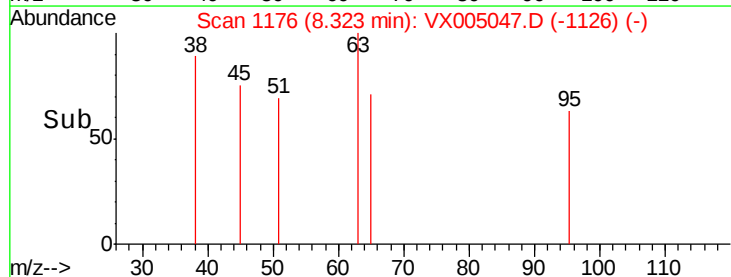
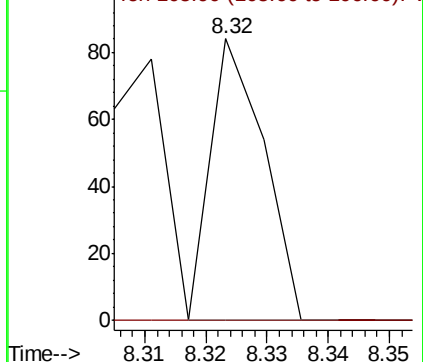


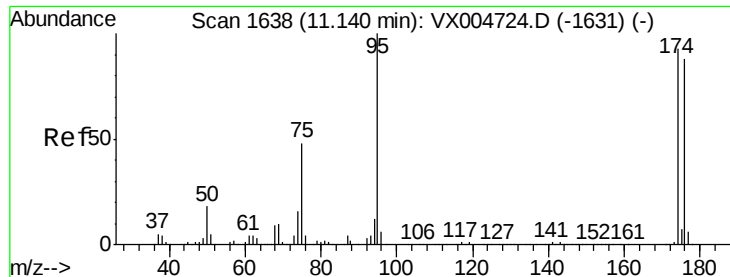
#58  
2-Chloroethyl Vinyl ether  
Concen: 14.261 ug/l  
RT: 8.32 min Scan# 1176  
Delta R.T. 0.01 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Tgt Ion: 63 Resp: 51  
Ion Ratio Lower Upper  
63 100  
106 0.0 21.0 31.6#



Abundance Ion 62.90 (62.60 to 63.60): VX0  
Ion 105.90 (105.60 to 106.60): V

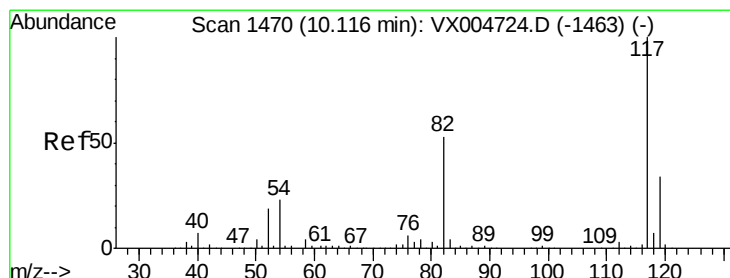
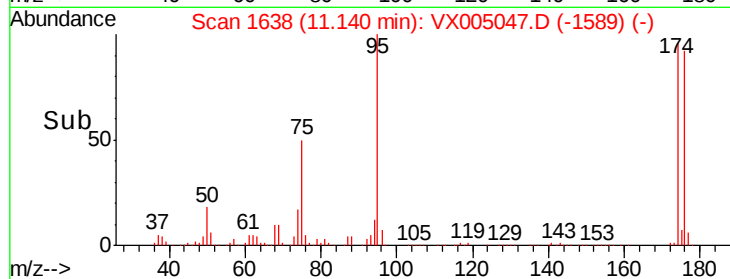
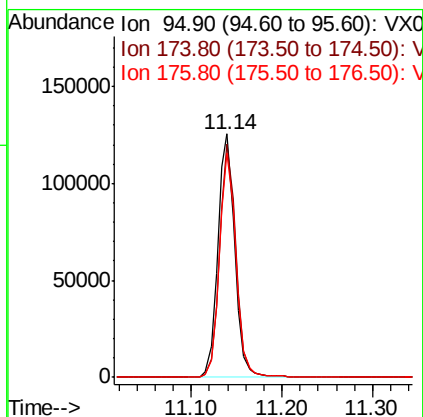
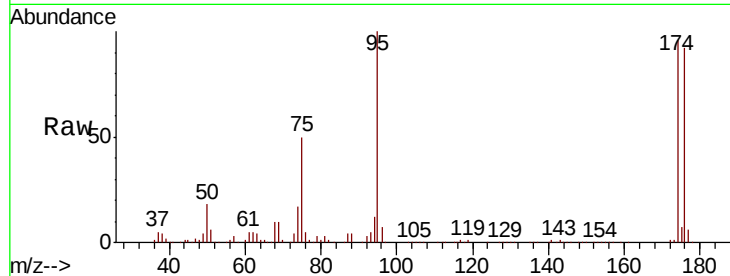




#62  
4-Bromofluorobenzene  
Concen: 48.466 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. 0.00 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

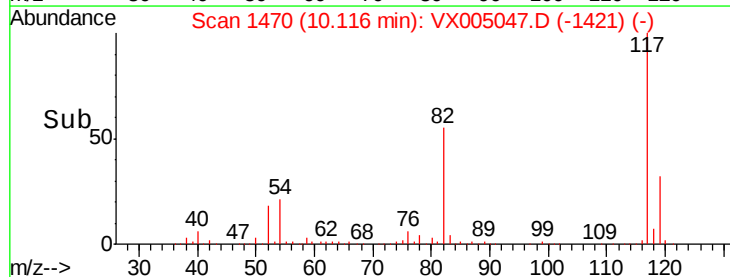
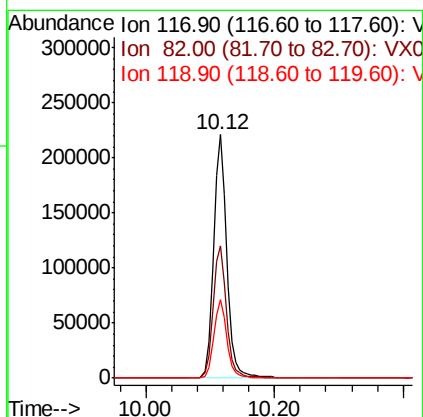
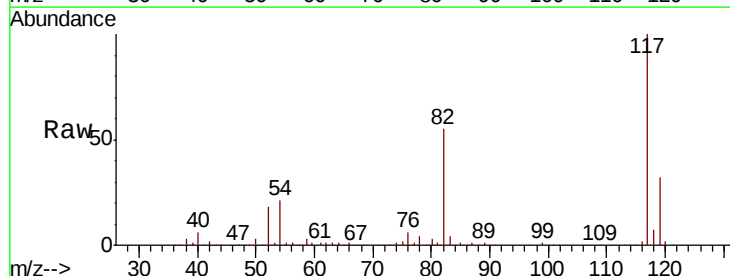
Instrument :  
MSVOA\_X  
ClientSampleId :

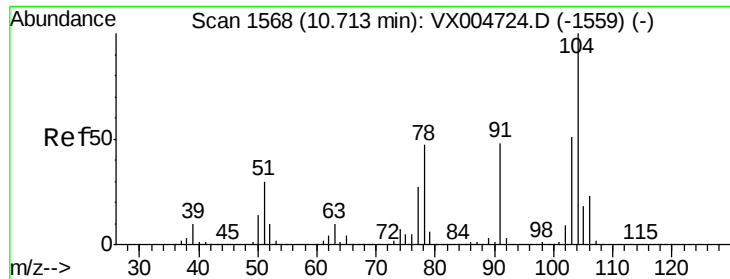
Tot Ion: 95 Resp: 163728  
Ion Ratio Lower Upper  
95 100  
174 93.2 0.0 185.0  
176 90.0 0.0 180.2



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VX005047.D  
Acq: 05 Oct 2018 04:57

Tgt Ion: 117 Resp: 319245  
Ion Ratio Lower Upper  
117 100  
82 54.5 42.2 63.4  
119 32.2 27.4 41.0





#70

Stvrene

Concen: 2.182 ug/l

RT: 10.71 min Scan# 1568

Delta R.T. 0.00 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

Instrument :

MSVOA\_X

ClientSampleId :

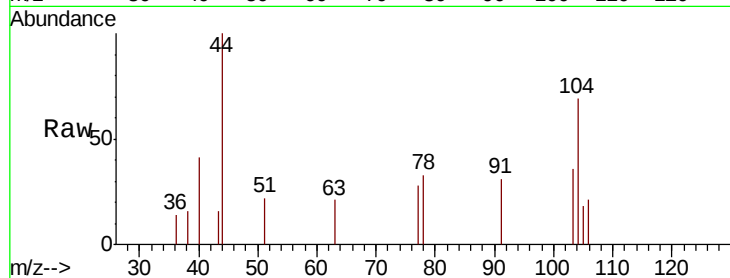
Tot Ion:104 Resp: 377

Ion Ratio Lower Upper

104 100

78 70.8 40.0 60.0#

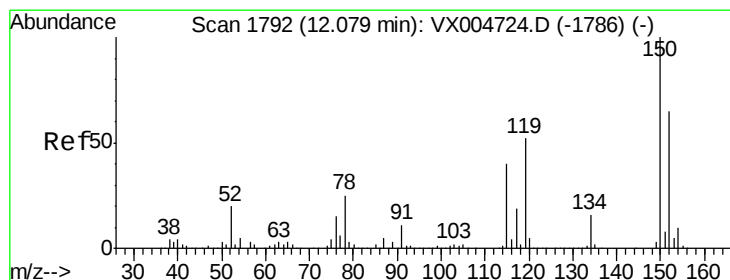
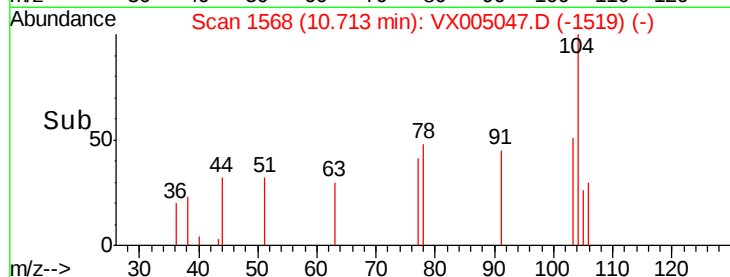
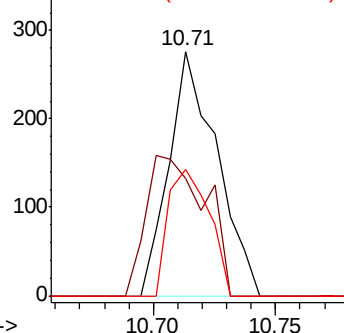
103 44.0 44.3 66.5#



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VX0

Ion 103.00 (102.70 to 103.70): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

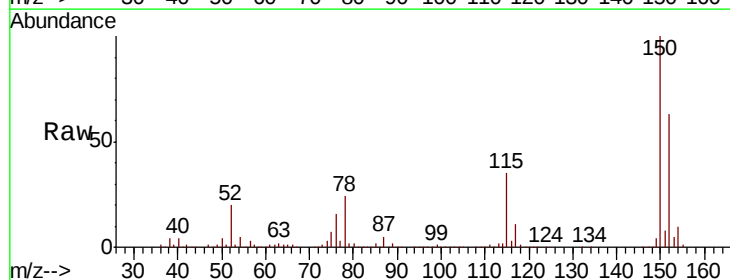
Tgt Ion:152 Resp: 168001

Ion Ratio Lower Upper

152 100

115 55.8 40.2 120.6

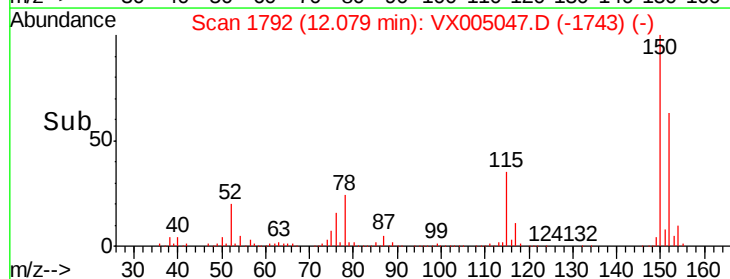
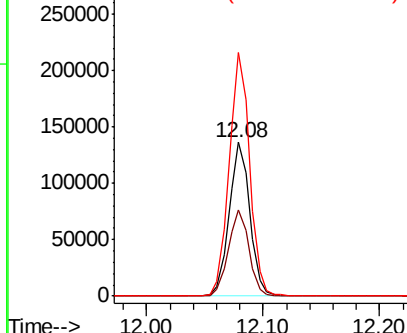
150 157.3 0.0 351.0

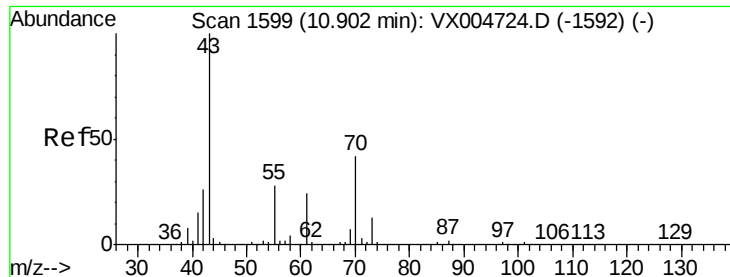


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 1.780 ug/l

RT: 10.90 min Scan# 1598

Delta R.T. -0.01 min

Lab File: VX005047.D

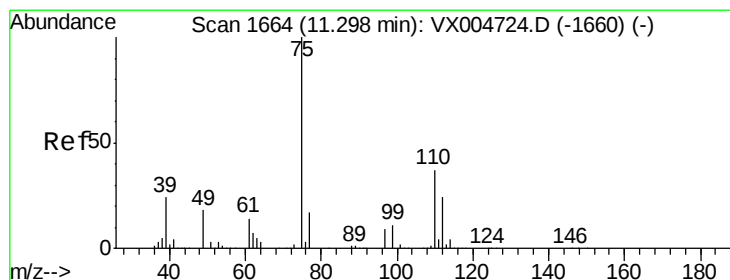
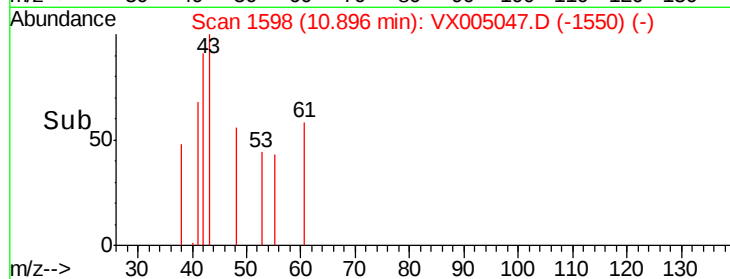
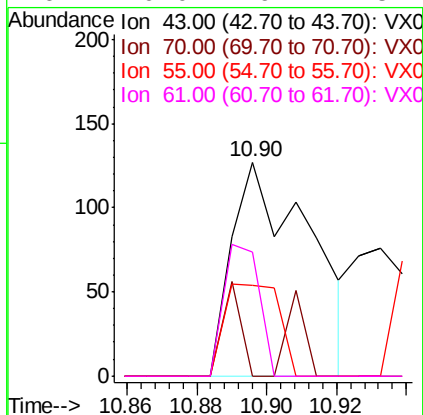
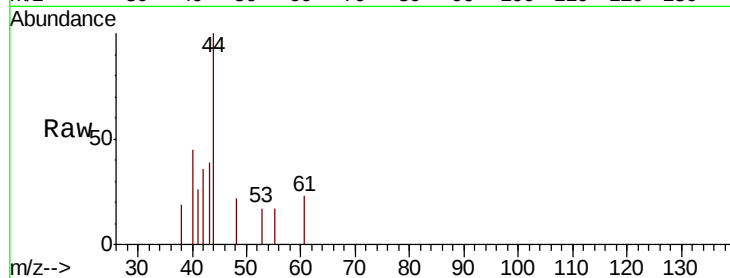
Acq: 05 Oct 2018 04:57

Instrument :

MSVOA\_X

ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 196   |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 70       | 0.0   | 32.6  | 48.8# |
| 55       | 30.1  | 21.6  | 32.4  |
| 61       | 0.0   | 19.1  | 28.7# |



#76

1,2,3-Trichloropropane

Concen: 21.765 ug/l

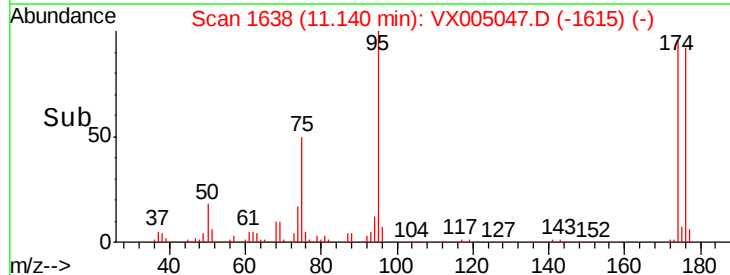
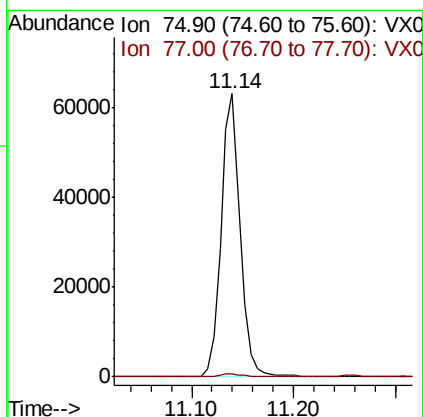
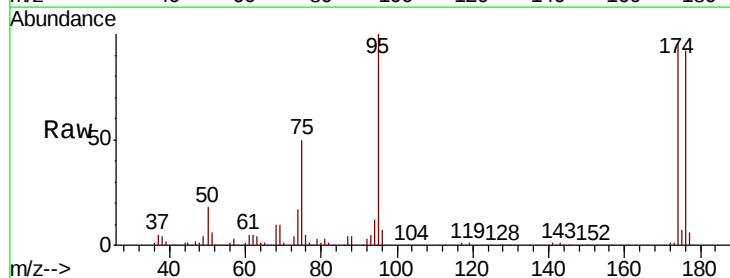
RT: 11.14 min Scan# 1638

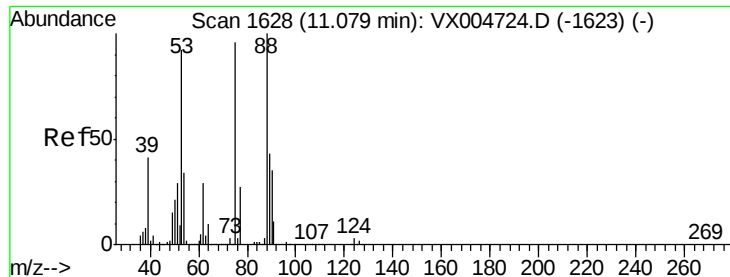
Delta R.T. -0.16 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 75    | Resp: | 81957 |
| Ion      | Ratio | Lower | Upper |
| 75       | 100   |       |       |
| 77       | 1.4   | 21.4  | 64.3# |





#81

trans-1,4-Dichloro-2-butene

Concen: 58.990 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.06 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

Instrument :

MSVOA\_X

ClientSampleId :

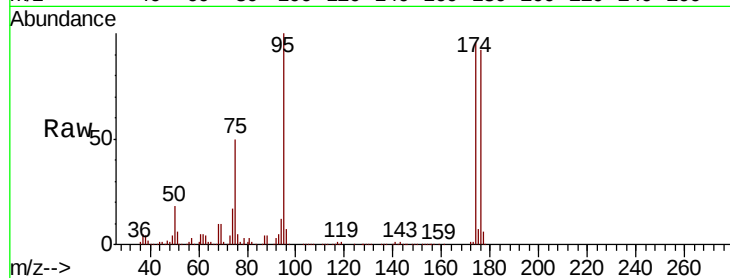
Tot Ion: 75 Resp: 81957

Ion Ratio Lower Upper

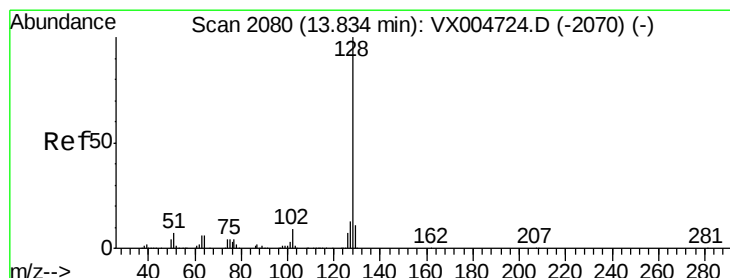
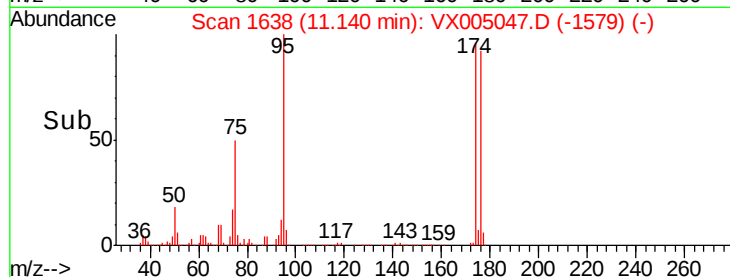
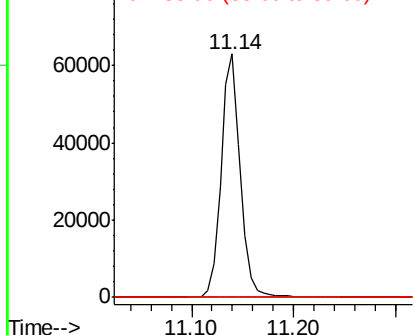
75 100

53 0.3 80.2 120.4#

89 0.0 37.1 55.7#



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



#95

Naphthalene

Concen: 0.864 ug/l

RT: 13.83 min Scan# 2080

Delta R.T. 0.00 min

Lab File: VX005047.D

Acq: 05 Oct 2018 04:57

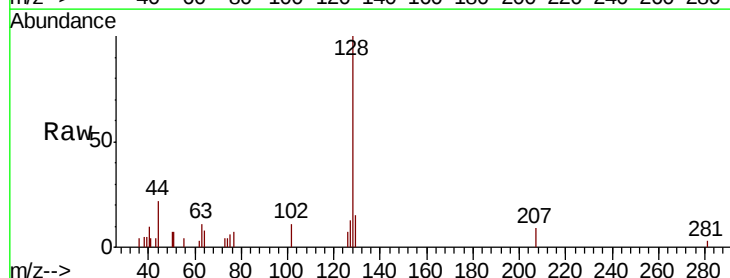
Tgt Ion: 128 Resp: 2055

Ion Ratio Lower Upper

128 100

127 12.1 10.4 15.6

129 10.6 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 127.00 (126.70 to 127.70): V  
Ion 129.00 (128.70 to 129.70): V

