

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX070819\  
 Data File : VX010715.D  
 Acq On : 08 Jul 2019 23:36  
 Operator : JC/SP  
 Sample : K3691-13  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 E3-TB01-190704

Quant Time: Jul 09 01:15:14 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jun 20 03:31:56 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 230332   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 359810   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 325991   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 149983   | 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   | 115456   | 53.46 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.92% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 109600   | 49.79 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.58%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 423381   | 50.27 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.54% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 144917   | 47.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.32%  |          |

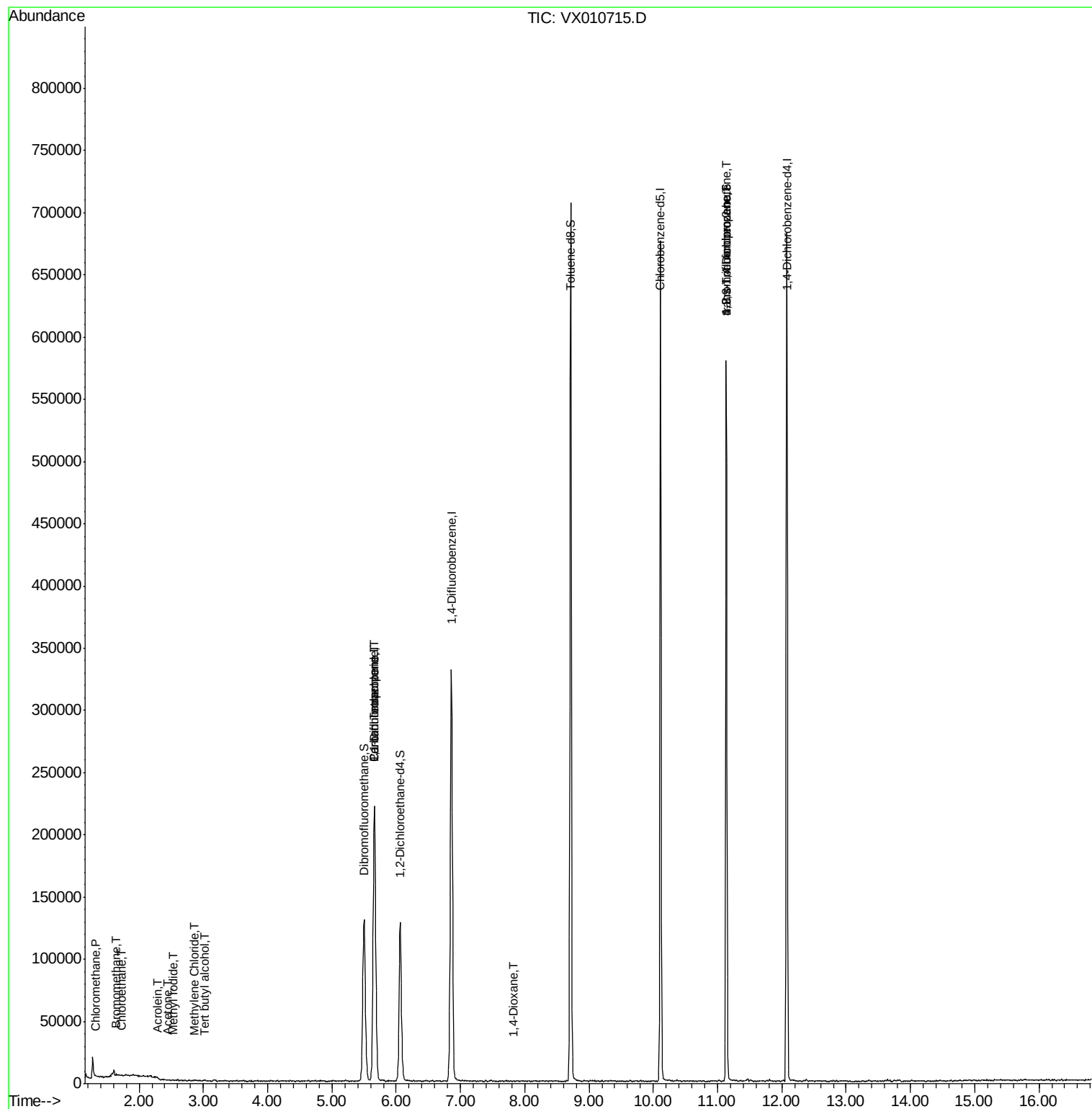
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 594      | 0.319  | ug/l   | 95     |
| 5) Bromomethane                | 1.65  | 94   | 802      | 0.806  | ug/l # | 80     |
| 6) Chloroethane                | 1.72  | 64   | 631      | 0.524  | ug/l # | 42     |
| 10) Methyl Iodide              | 2.52  | 142  | 822      | 0.294  | ug/l # | 96     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 286      | 0.506  | ug/l # | 94     |
| 13) Acrolein                   | 2.28  | 56   | 175      | 0.467  | ug/l # | 33     |
| 16) Acetone                    | 2.44  | 43   | 479      | 0.443  | ug/l # | 85     |
| 20) Methylene Chloride         | 2.87  | 84   | 497      | 0.223  | ug/l # | 59     |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 14695    | 5.139  | ug/l # | 38     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 21250    | 6.863  | ug/l # | 15     |
| 49) 1,4-Dioxane                | 7.84  | 88   | 22       | 0.338  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 69598    | 25.465 | ug/l # | 33     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 69598    | 59.407 | ug/l # | 16     |

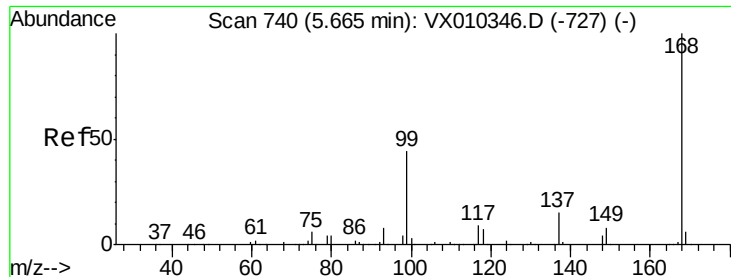
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Sample : K3691-13  
Misc : 5.0mL/MSVOA X/WATER  
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Instrument :  
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Quant Time: Jul 09 01:15:14 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X061919W.M  
Quant Title : SW846 8260  
QLast Update : Thu Jun 20 03:31:56 2019  
Response via : Initial Calibration

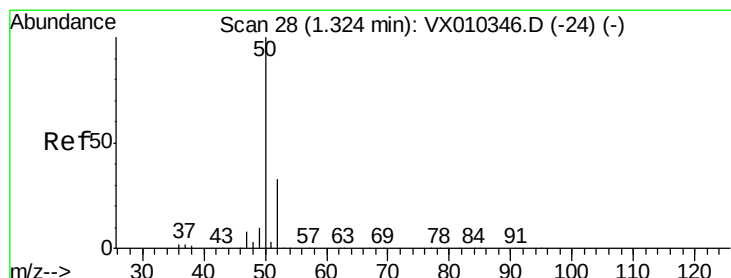
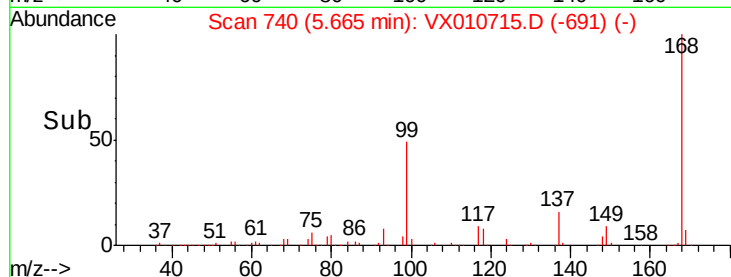
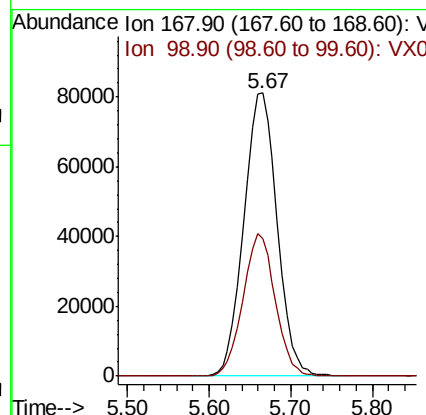
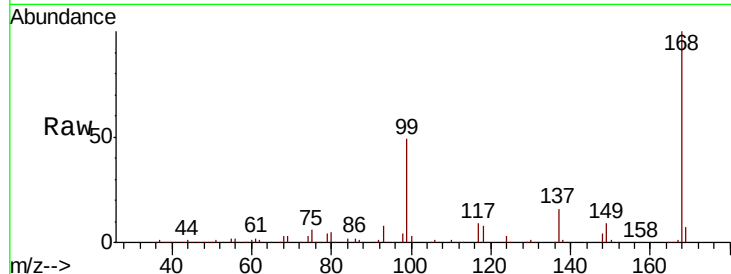




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. 0.00 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

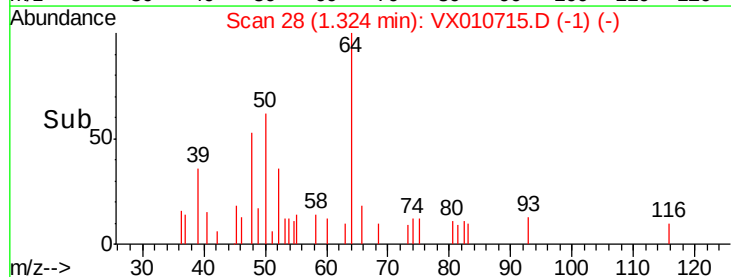
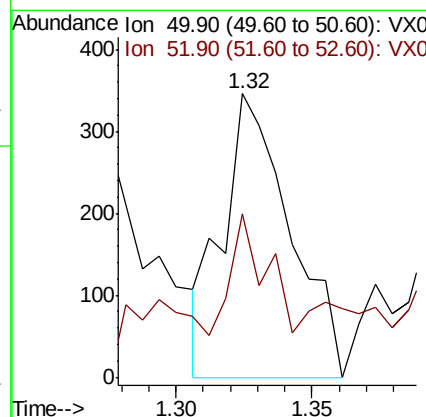
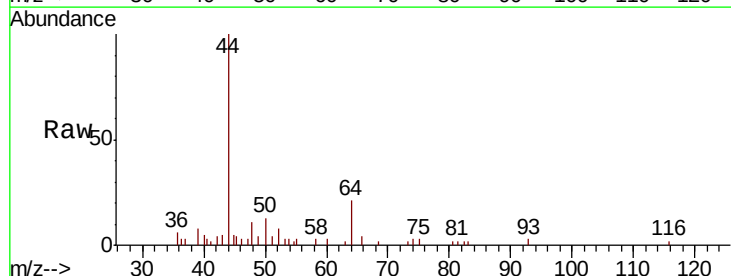
Instrument :  
MSVOA\_X  
ClientSampleId :  
E3-TB01-190704

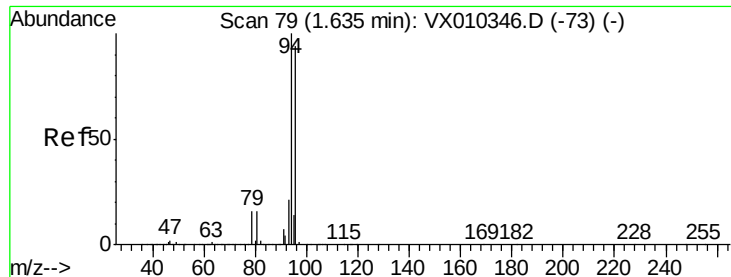
Tot Ion:168 Resp: 230332  
Ion Ratio Lower Upper  
168 100  
99 48.6 35.5 53.3



#3  
Chloromethane  
Concen: 0.319 ug/l  
RT: 1.32 min Scan# 28  
Delta R.T. 0.00 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

Tgt Ion: 50 Resp: 594  
Ion Ratio Lower Upper  
50 100  
52 36.1 26.5 39.7





#5

Bromomethane

Concen: 0.806 ug/l

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX010715.D

Acq: 08 Jul 2019 23:36

Instrument :

MSVOA\_X

ClientSampleId :

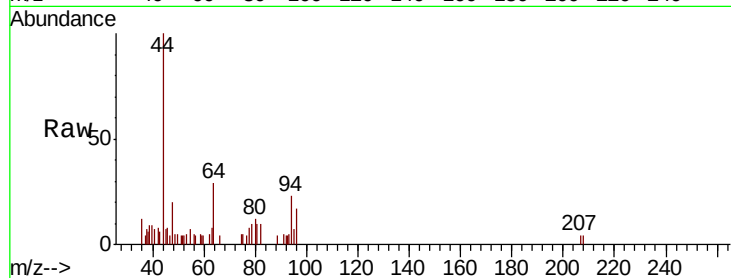
E3-TB01-190704

Tot Ion: 94 Resp: 802

Ion Ratio Lower Upper

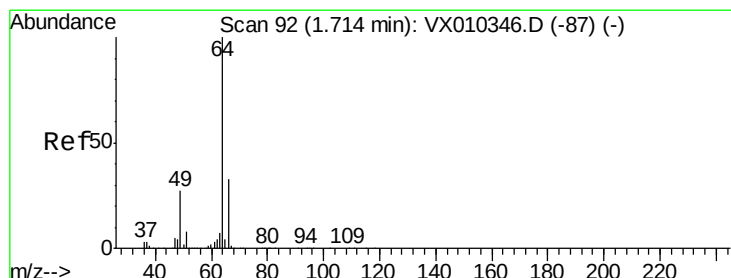
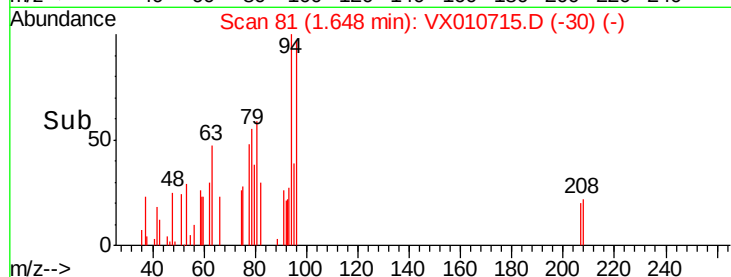
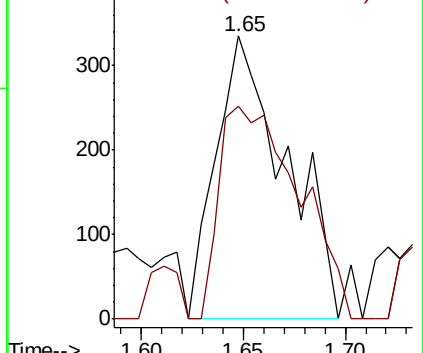
94 100

96 75.2 75.5 113.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: 0.524 ug/l

RT: 1.72 min Scan# 93

Delta R.T. 0.01 min

Lab File: VX010715.D

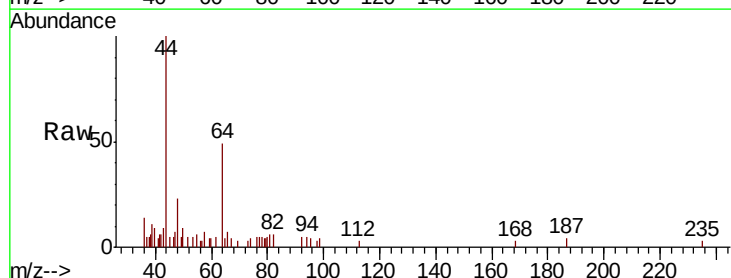
Acq: 08 Jul 2019 23:36

Tgt Ion: 64 Resp: 631

Ion Ratio Lower Upper

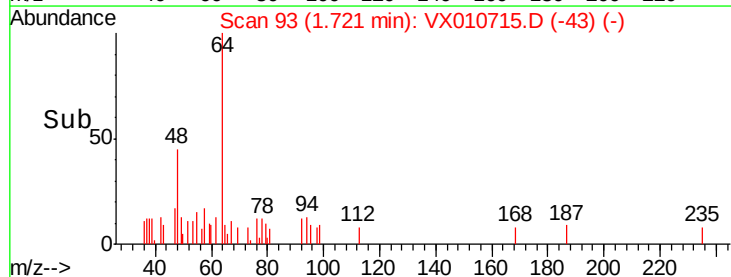
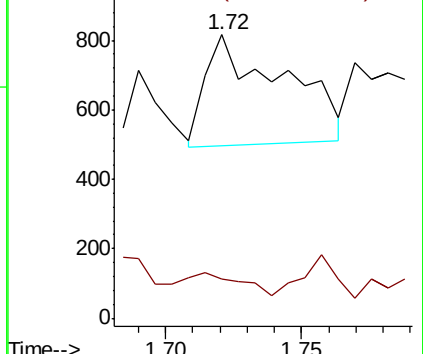
64 100

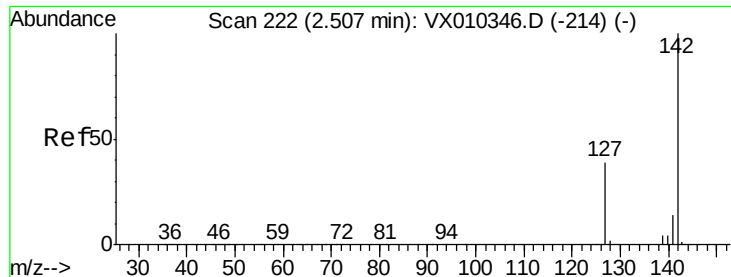
66 0.7 26.6 40.0#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

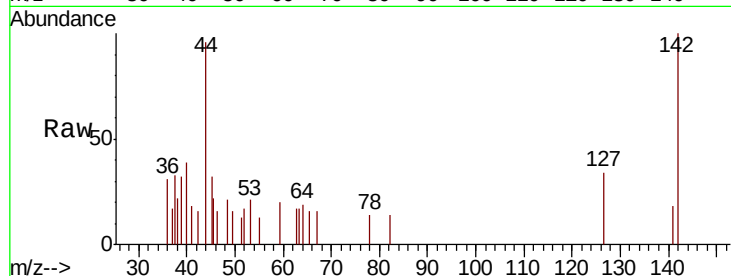




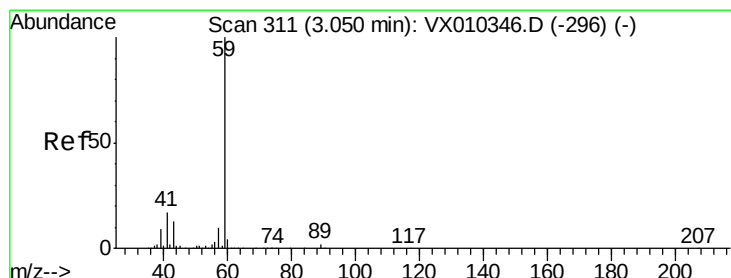
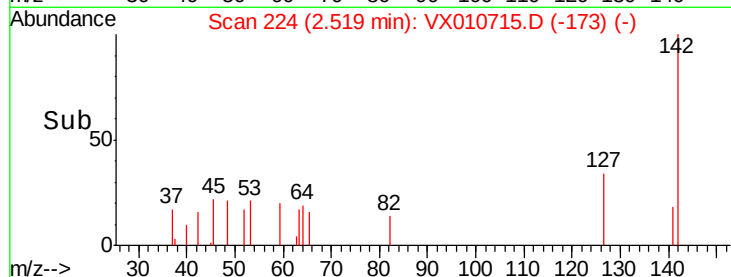
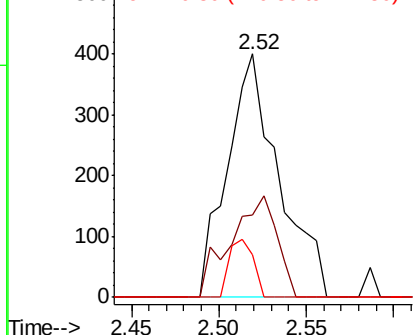
#10  
Methvl Iodide  
Concen: 0.294 ug/l  
RT: 2.52 min Scan# 224  
Delta R.T. 0.01 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

Instrument :  
MSVOA\_X  
ClientSampleId :  
E3-TB01-190704

Tot Ion:142 Resp: 822  
Ion Ratio Lower Upper  
142 100  
127 37.5 31.1 46.7  
141 11.2 11.2 16.8#

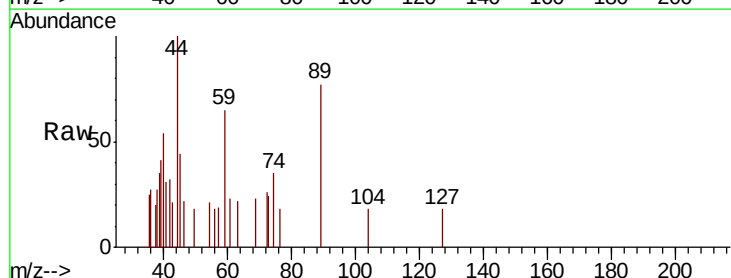


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

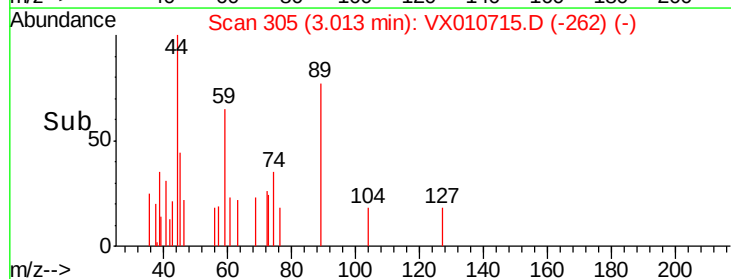
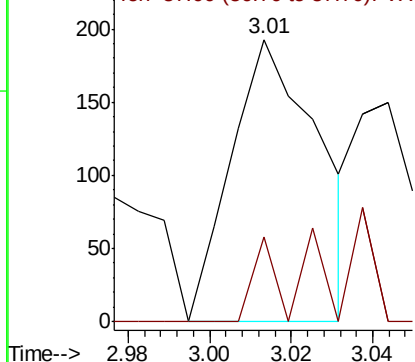


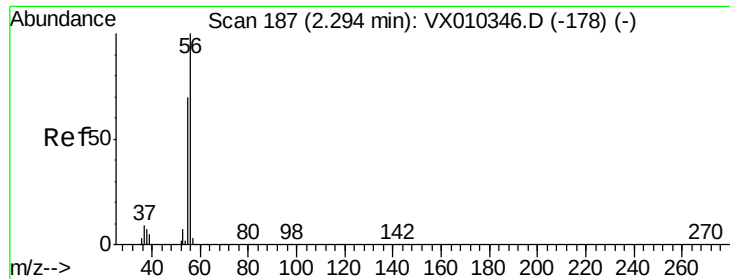
#11  
Tert butyl alcohol  
Concen: 0.506 ug/l  
RT: 3.01 min Scan# 305  
Delta R.T. -0.04 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

Tgt Ion: 59 Resp: 286  
Ion Ratio Lower Upper  
59 100  
57 7.3 7.7 11.5#



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





#13

Acrolein

Concen: 0.467 ug/l

RT: 2.28 min Scan# 185

Delta R.T. -0.01 min

Lab File: VX010715.D

Acq: 08 Jul 2019 23:36

Instrument :

MSVOA\_X

ClientSampleId :

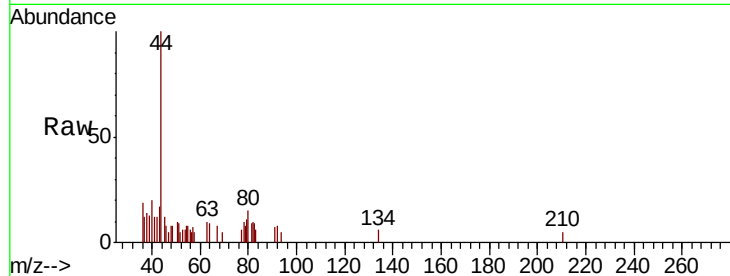
E3-TB01-190704

Tot Ion: 56 Resp: 175

Ion Ratio Lower Upper

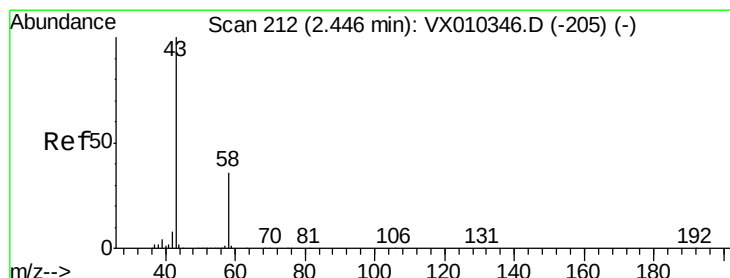
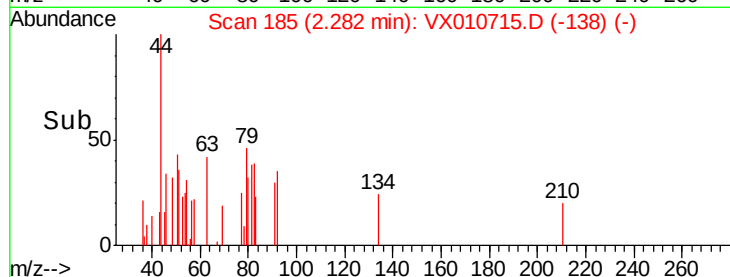
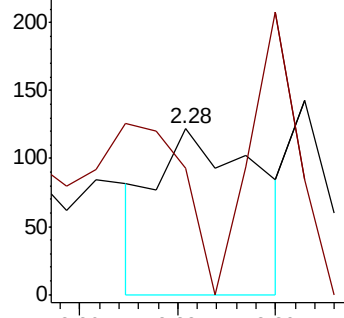
56 100

55 126.9 56.9 85.3#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 0.443 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX010715.D

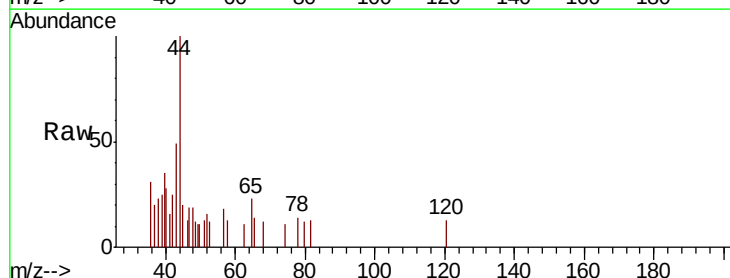
Acq: 08 Jul 2019 23:36

Tgt Ion: 43 Resp: 479

Ion Ratio Lower Upper

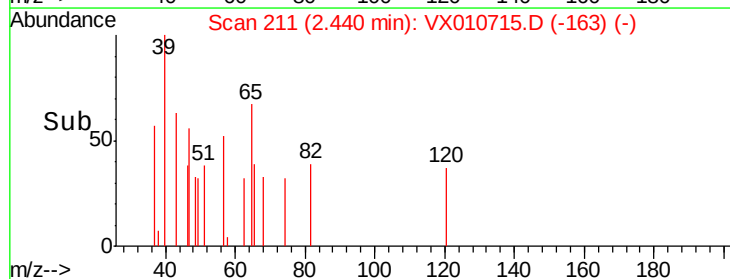
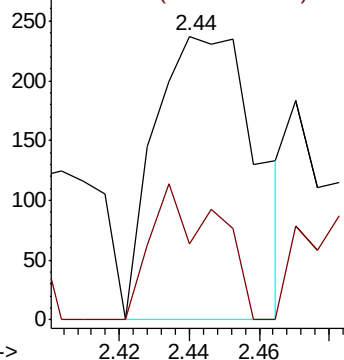
43 100

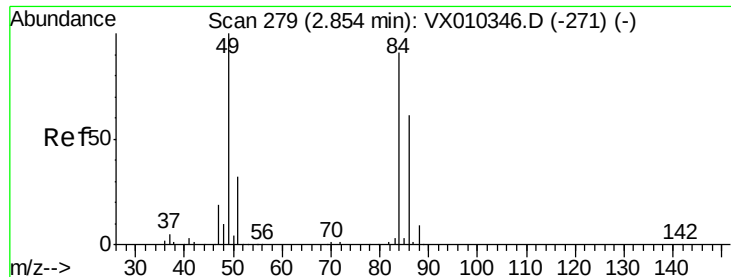
58 27.0 28.9 43.3#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

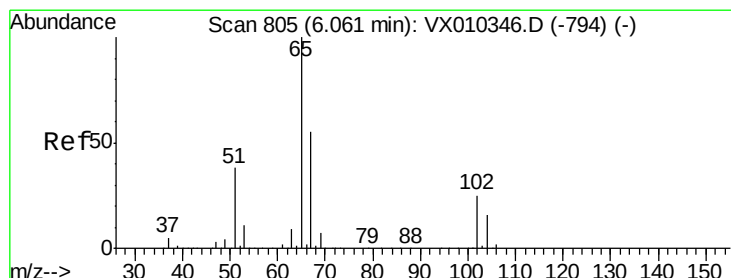
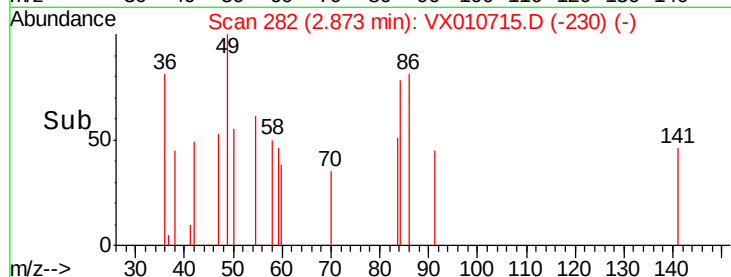
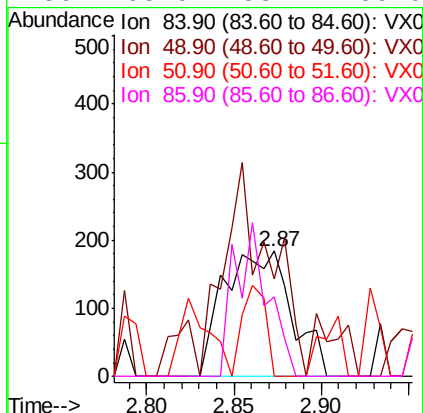
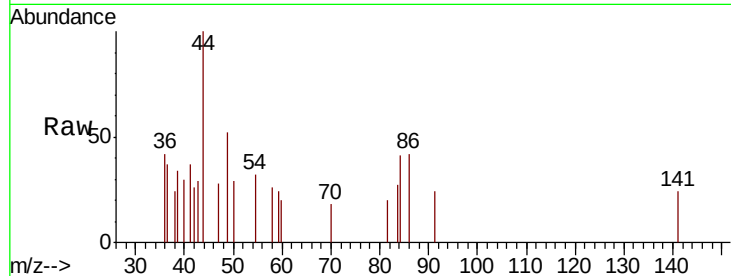




#20  
Methvlene Chloride  
Concen: 0.223 ug/l  
RT: 2.87 min Scan# 282  
Delta R.T. 0.02 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

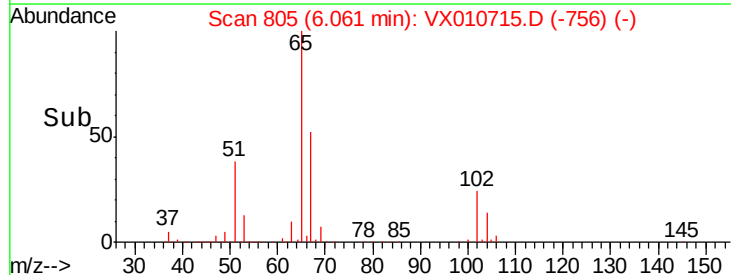
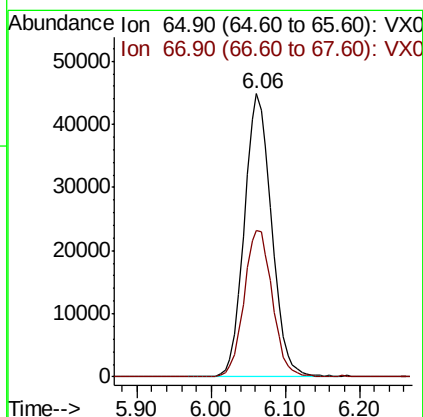
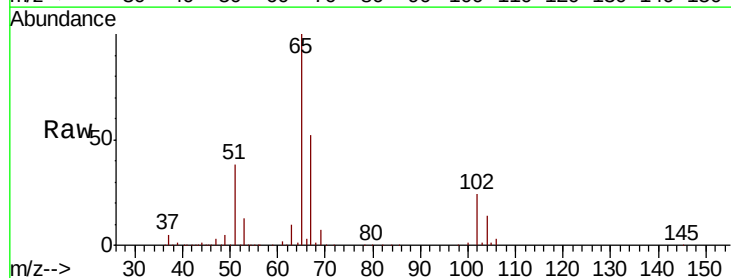
Instrument :  
MSVOA\_X  
ClientSampleId :  
E3-TB01-190704

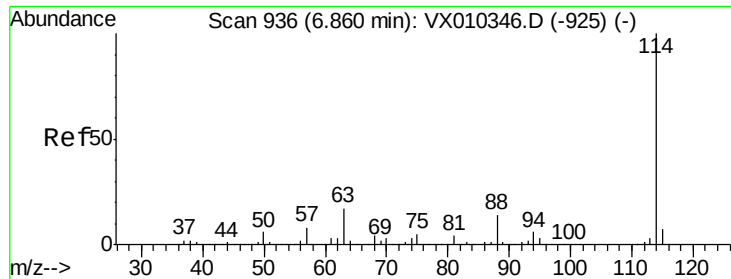
Tot Ion: 84 Resp: 497  
Ion Ratio Lower Upper  
84 100  
49 48.4 87.5 131.3#  
51 0.0 27.7 41.5#  
86 63.0 53.4 80.0



#33  
1,2-Dichloroethane-d4  
Concen: 53.462 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. 0.00 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

Tgt Ion: 65 Resp: 115456  
Ion Ratio Lower Upper  
65 100  
67 53.6 0.0 110.2

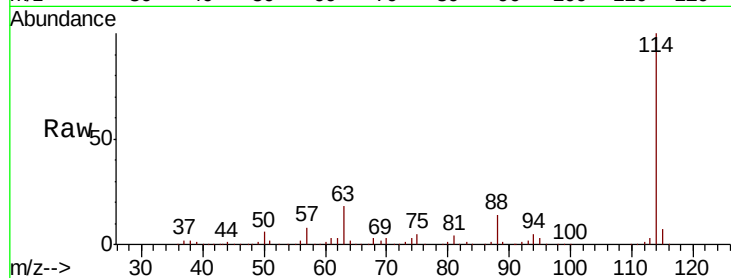




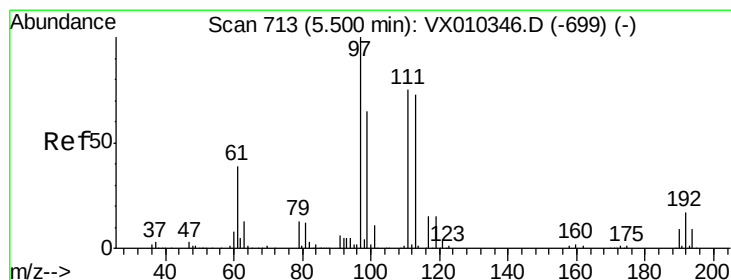
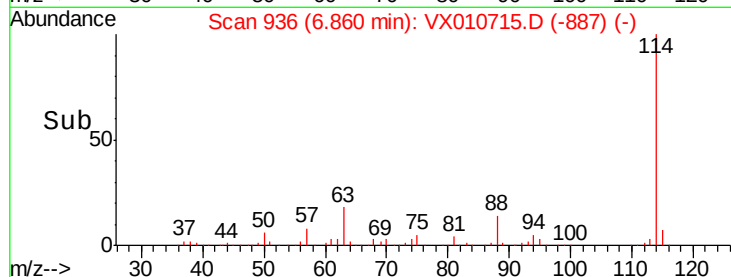
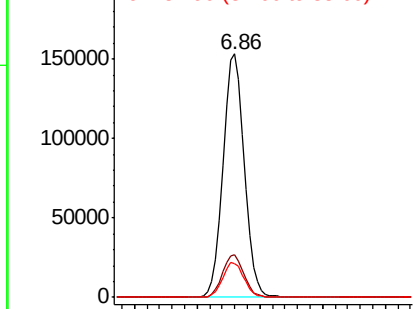
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.86 min Scan# 936  
Delta R.T. 0.00 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

Instrument :  
MSVOA\_X  
ClientSampleId :  
E3-TB01-190704

Tot Ion:114 Resp: 359810  
Ion Ratio Lower Upper  
114 100  
63 17.5 0.0 33.8  
88 14.1 0.0 27.6

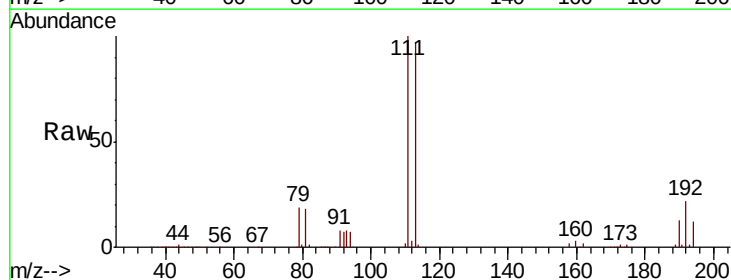


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VX0  
Ion 87.90 (87.60 to 88.60): VX0

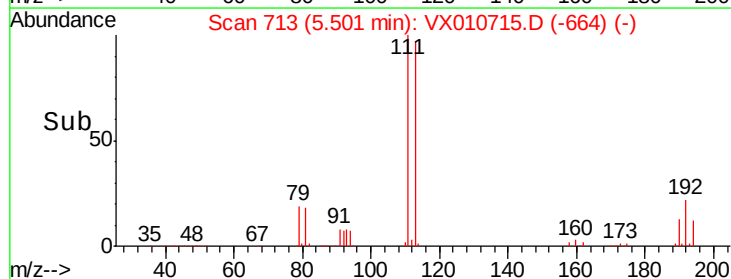
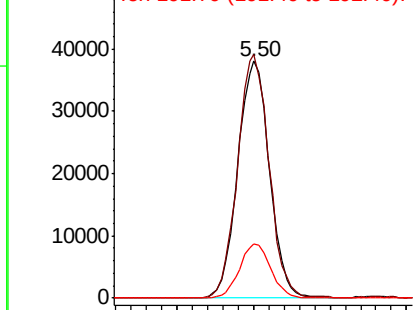


#35  
Dibromofluoromethane  
Concen: 49.785 ug/l  
RT: 5.50 min Scan# 713  
Delta R.T. 0.00 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

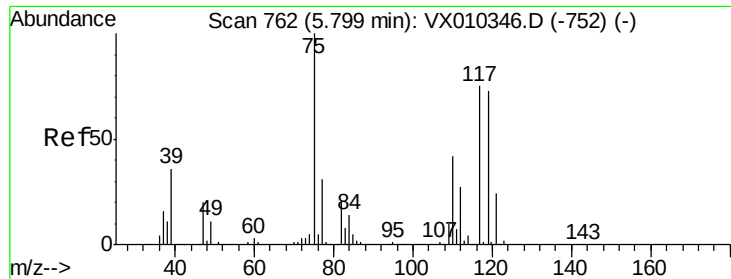
Tgt Ion:113 Resp: 109600  
Ion Ratio Lower Upper  
113 100  
111 101.5 81.2 121.8  
192 22.6 18.6 27.8



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



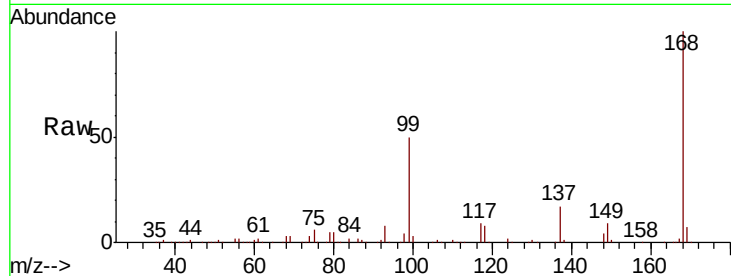




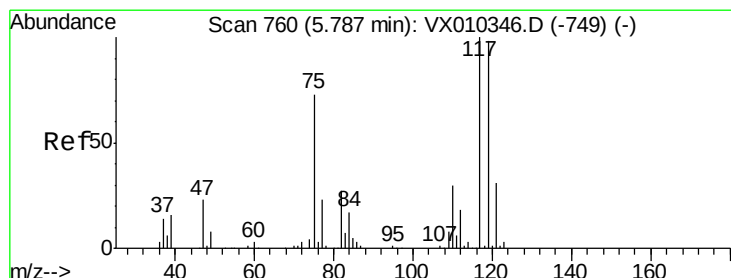
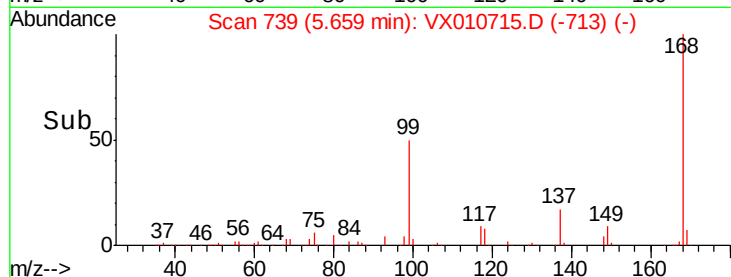
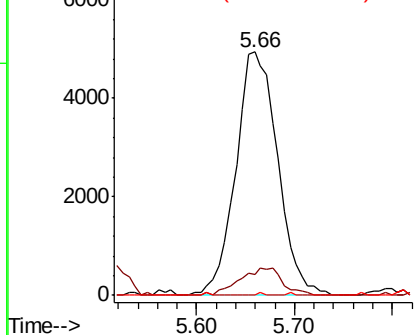
#36  
 1,1-Dichloropropene  
 Concen: 5.139 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX010715.D  
 Acq: 08 Jul 2019 23:36

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 E3-TB01-190704

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 0.0   | 20.8  | 62.2# |
| 77      | 0.2   | 25.4  | 38.0# |

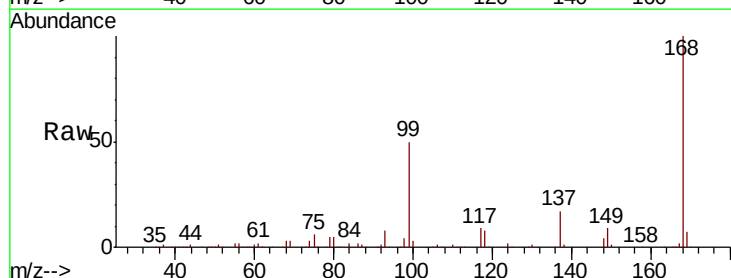


Abundance Ion 74.90 (74.60 to 75.60): VX0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VX0

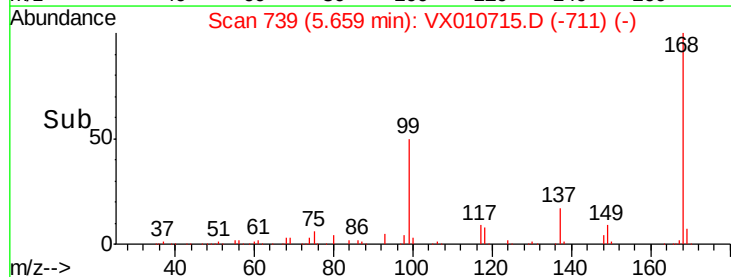
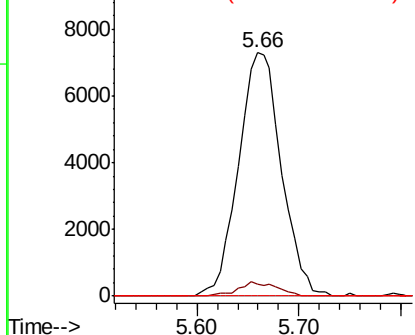


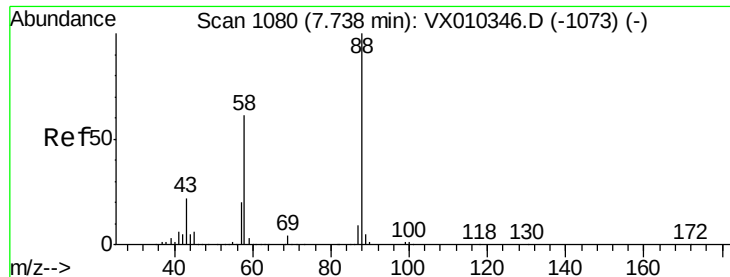
#38  
 Carbon Tetrachloride  
 Concen: 6.863 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.13 min  
 Lab File: VX010715.D  
 Acq: 08 Jul 2019 23:36

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.8   | 78.2  | 117.4# |
| 121     | 0.0   | 24.7  | 37.1#  |



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

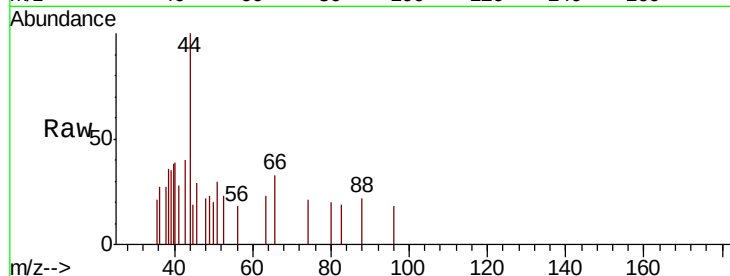




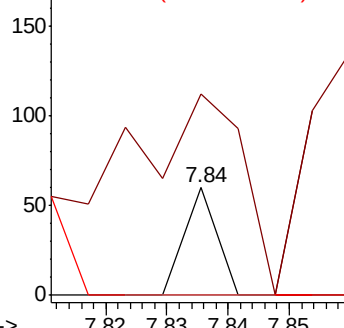
#49  
1,4-Dioxane  
Concen: 0.338 ug/l  
RT: 7.84 min Scan# 1096  
Delta R.T. 0.10 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

Instrument :  
MSVOA\_X  
ClientSampleId :  
E3-TB01-190704

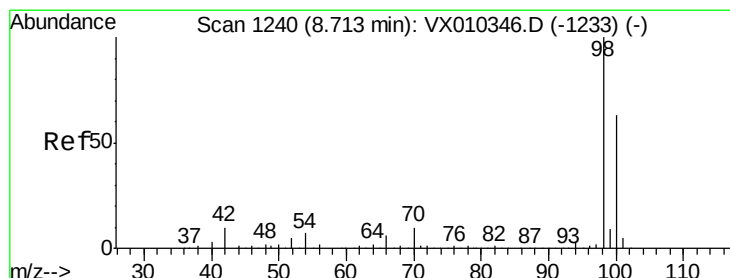
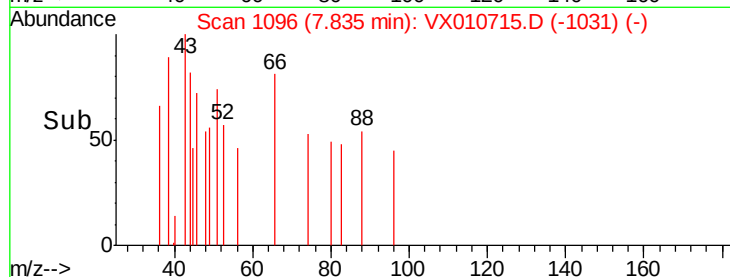
Tot Ion: 88 Resp: 22  
Ion Ratio Lower Upper  
88 100  
43 604.5 20.2 30.2#  
58 0.0 49.5 74.3#



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

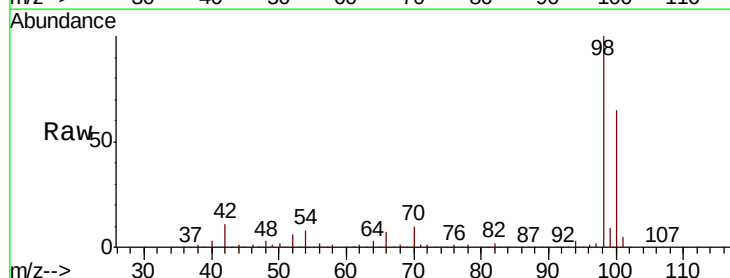


Time-->

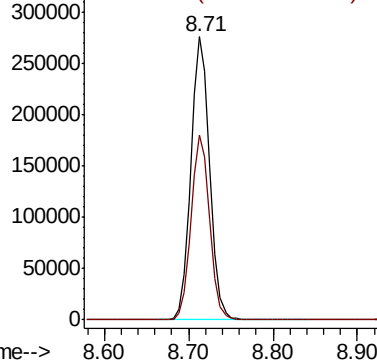


#50  
Toluene-d8  
Concen: 50.269 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX010715.D  
Acq: 08 Jul 2019 23:36

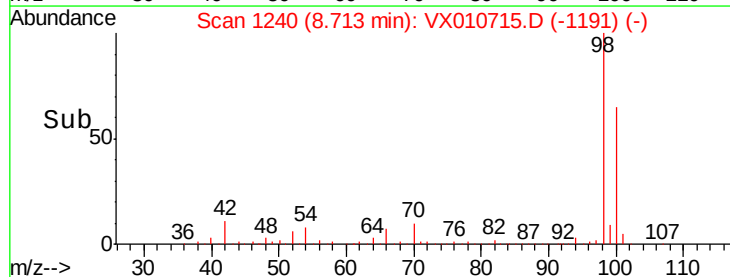
Tgt Ion: 98 Resp: 423381  
Ion Ratio Lower Upper  
98 100  
100 64.6 51.6 77.4

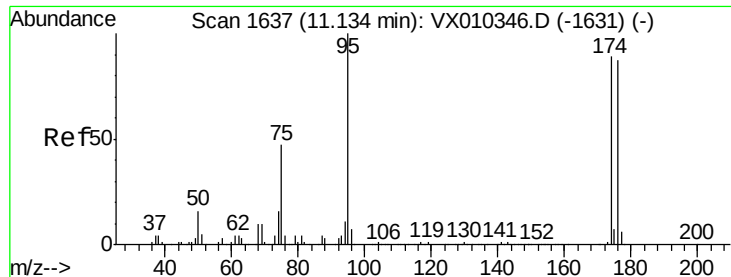


Abundance Ion 98.00 (97.70 to 98.70): VX0  
Ion 100.00 (99.70 to 100.70): V



Time-->





#62

4-Bromofluorobenzene

Concen: 47.659 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX010715.D

Acq: 08 Jul 2019 23:36

Instrument :

MSVOA\_X

ClientSampleId :

E3-TB01-190704

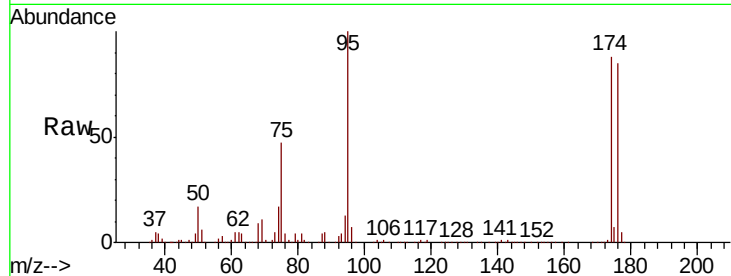
Tot Ion: 95 Resp: 144917

Ion Ratio Lower Upper

95 100

174 91.9 0.0 187.6

176 89.0 0.0 184.0

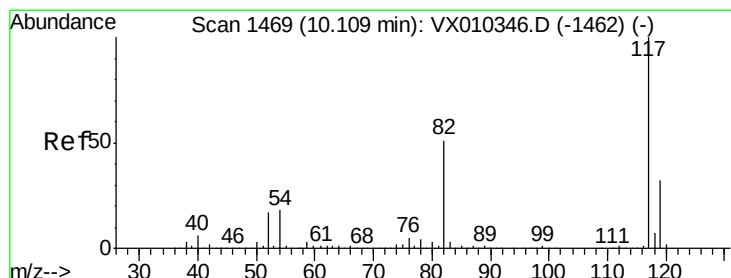
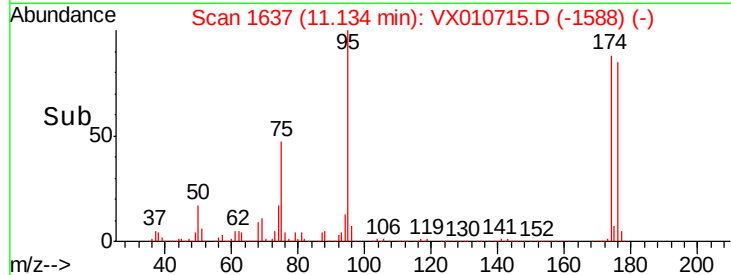
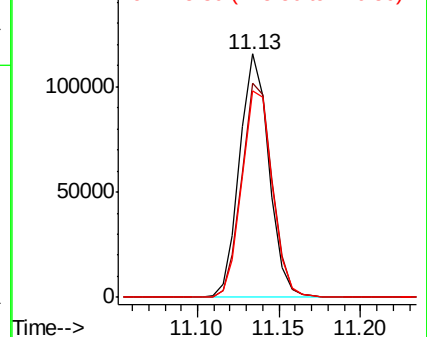


Abundance

Ion 94.90 (94.60 to 95.60): VX010715.D (-1588) (-)

Ion 173.80 (173.50 to 174.50): VX010715.D (-1588) (-)

Ion 175.80 (175.50 to 176.50): VX010715.D (-1588) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VX010715.D

Acq: 08 Jul 2019 23:36

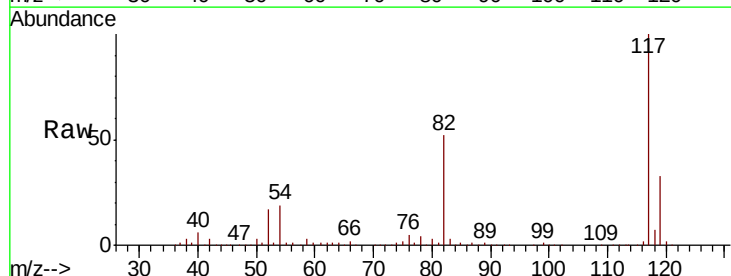
Tgt Ion: 117 Resp: 325991

Ion Ratio Lower Upper

117 100

82 52.1 41.2 61.8

119 32.8 25.5 38.3

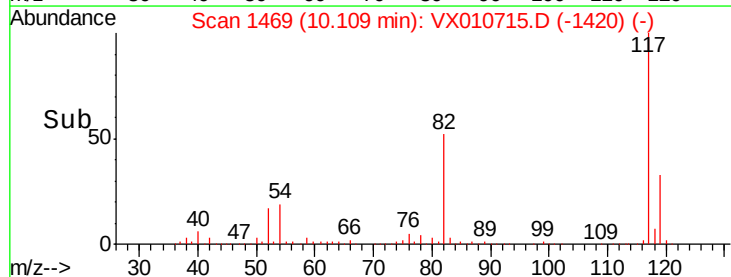
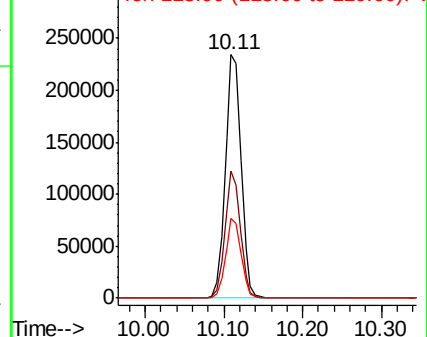


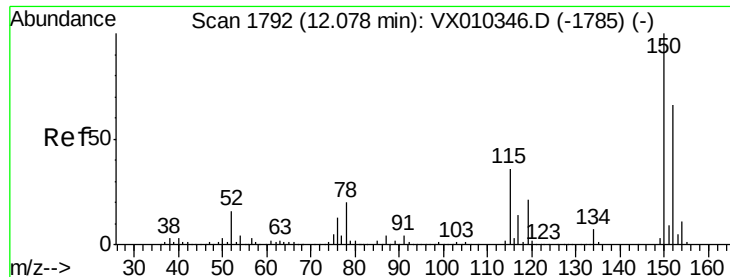
Abundance

Ion 116.90 (116.60 to 117.60): VX010715.D (-1420) (-)

Ion 82.00 (81.70 to 82.70): VX010715.D (-1420) (-)

Ion 118.90 (118.60 to 119.60): VX010715.D (-1420) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX010715.D

Acq: 08 Jul 2019 23:36

Instrument :

MSVOA\_X

ClientSampleId :

E3-TB01-190704

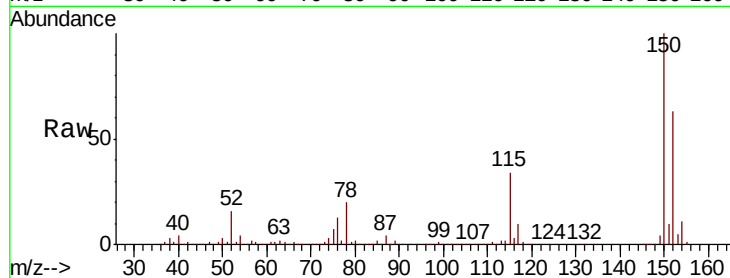
Tot Ion:152 Resp: 149983

Ion Ratio Lower Upper

152 100

115 54.8 38.6 115.7

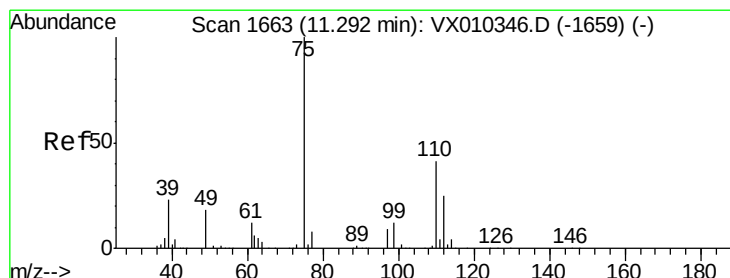
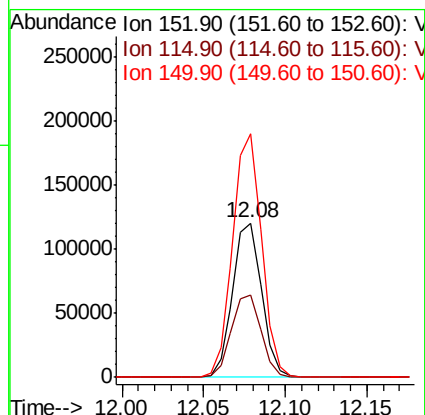
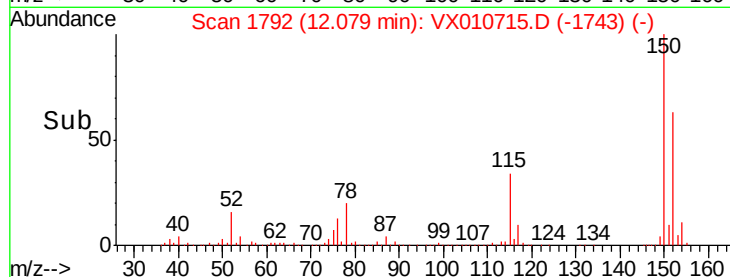
150 157.3 0.0 347.4



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



#76

1,2,3-Trichloropropane

Concen: 25.465 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX010715.D

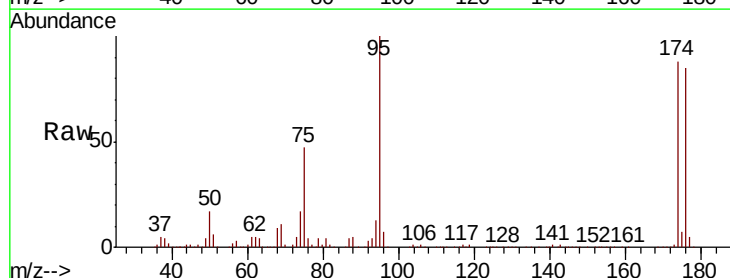
Acq: 08 Jul 2019 23:36

Tgt Ion: 75 Resp: 69598

Ion Ratio Lower Upper

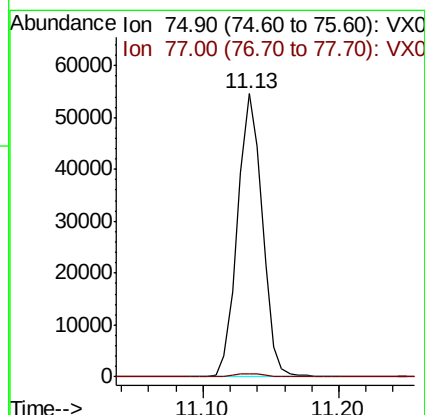
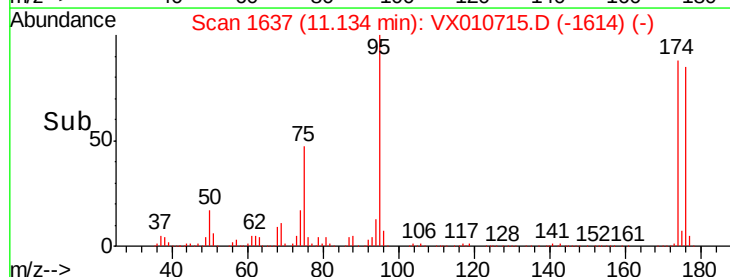
75 100

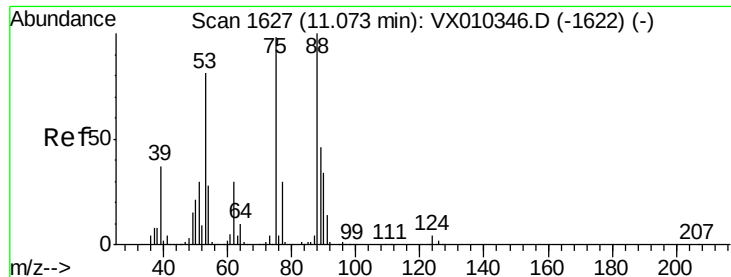
77 1.4 22.6 67.8#



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: 59.407 ug/l  
 RT: 11.13 min Scan# 1637  
 Delta R.T. 0.06 min  
 Lab File: VX010715.D  
 Acq: 08 Jul 2019 23:36

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 E3-TB01-190704

Tot Ion: 75 Resp: 69598  
 Ion Ratio Lower Upper  
 75 100  
 53 0.1 66.1 99.1#  
 89 0.0 37.8 56.6#

