

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX050919\  
 Data File : VX009459.D  
 Acq On : 10 May 2019 04:13  
 Operator : JC/SP  
 Sample : K2782-13  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: May 10 07:13:20 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu May 09 07:31:15 2019  
 Response via : Initial Calibration

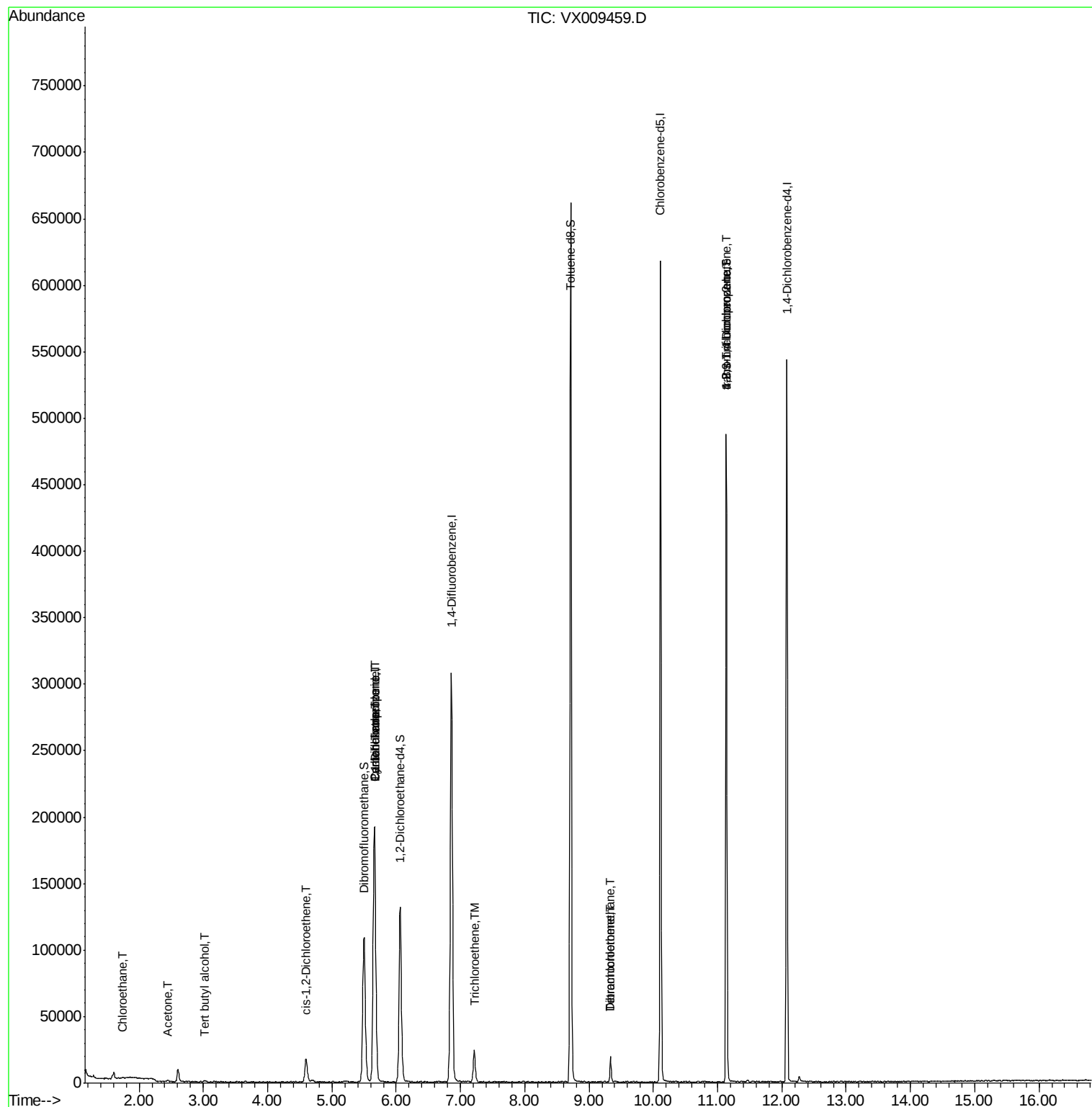
| Internal Standards             | R.T.  | QIon | Response | Conc      | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-----------|--------|----------|
| 1) Pentafluorobenzene          | 5.67  | 168  | 191910   | 50.00     | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene        | 6.86  | 114  | 303642   | 50.00     | ug/l   | 0.00     |
| 63) Chlorobenzene-d5           | 10.11 | 117  | 266370   | 50.00     | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 12.08 | 152  | 112987   | 50.00     | ug/l   | 0.00     |
| System Monitoring Compounds    |       |      |          |           |        |          |
| 33) 1,2-Dichloroethane-d4      | 6.06  | 65   | 125402   | 47.87     | ug/l   | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 95.74% |          |
| 35) Dibromofluoromethane       | 5.50  | 113  | 94235    | 49.37     | ug/l   | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 98.74% |          |
| 50) Toluene-d8                 | 8.71  | 98   | 380793   | 49.41     | ug/l   | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 98.82% |          |
| 62) 4-Bromofluorobenzene       | 11.13 | 95   | 126289   | 45.10     | ug/l   | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 90.20% |          |
| Target Compounds               |       |      |          |           |        |          |
|                                |       |      |          |           | Qvalue |          |
| 6) Chloroethane                | 1.74  | 64   | 1946     | 1.287     | ug/l # | 70       |
| 11) Tert butyl alcohol         | 3.01  | 59   | 664      | 1.095     | ug/l   | 100      |
| 16) Acetone                    | 2.44  | 43   | 1184     | 0.842     | ug/l   | 89       |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 10727    | 4.602     | ug/l   | 89       |
| 28) Bromochloromethane         | 5.00  | 49   | 41       | Below Cal | #      | 20       |
| 31) Cyclohexane                | 5.66  | 56   | 4061     | 1.048     | ug/l # | 1        |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 14921    | 5.288     | ug/l # | 51       |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 17600    | 6.865     | ug/l # | 16       |
| 44) Trichloroethene            | 7.21  | 130  | 8957     | 4.243     | ug/l   | 98       |
| 60) Dibromochloromethane       | 9.34  | 129  | 3494     | 1.652     | ug/l # | 11       |
| 64) Tetrachloroethene          | 9.34  | 164  | 3578     | 1.958     | ug/l   | 90       |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 63528    | 24.239    | ug/l # | 34       |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 63528    | 62.019    | ug/l # | 10       |

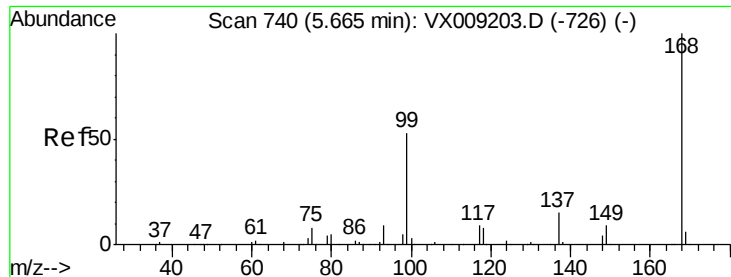
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX050919\  
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Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: May 10 07:13:20 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
Quant Title : SW846 8260  
QLast Update : Thu May 09 07:31:15 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: VX009459.D

Acq: 10 May 2019 04:13

Instrument :

MSVOA\_X

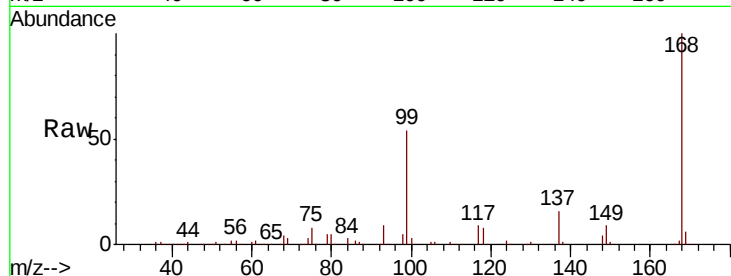
ClientSampled :

Tot Ion:168 Resp: 191910

Ion Ratio Lower Upper

168 100

99 54.3 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

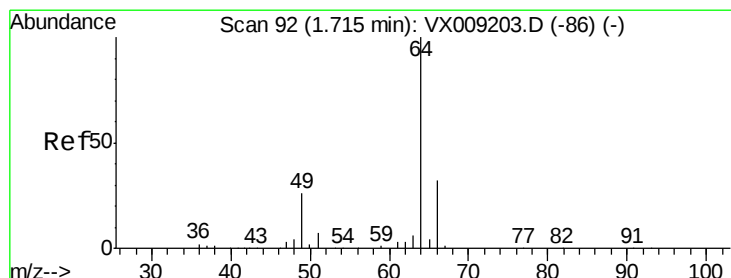
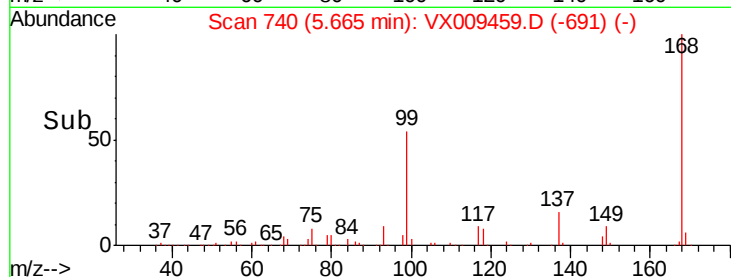
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#6

Chloroethane

Concen: 1.287 ug/l

RT: 1.74 min Scan# 96

Delta R.T. 0.02 min

Lab File: VX009459.D

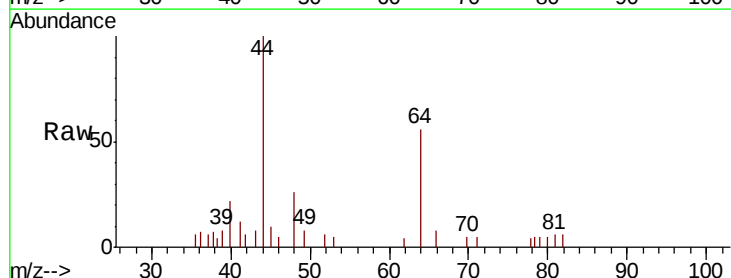
Acq: 10 May 2019 04:13

Tgt Ion: 64 Resp: 1946

Ion Ratio Lower Upper

64 100

66 15.1 25.3 37.9#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

1000

800

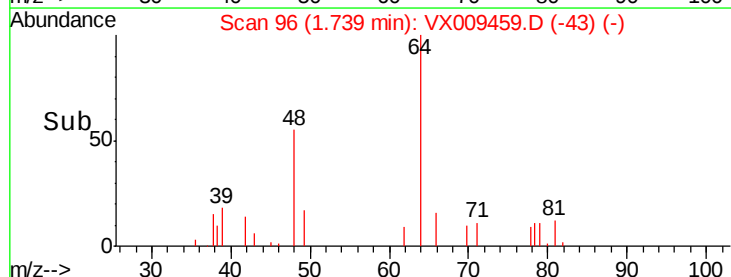
600

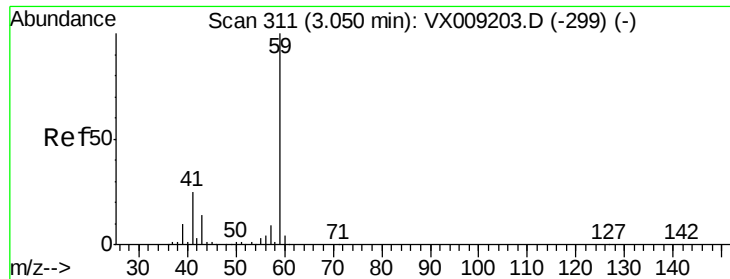
400

200

0

Time--> 1.60 1.65 1.70 1.75

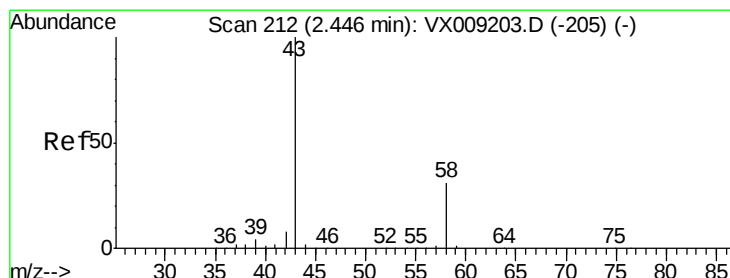
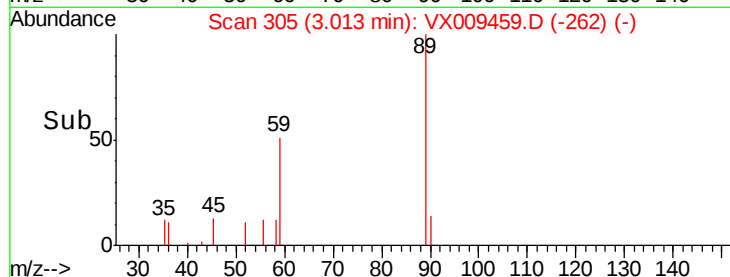
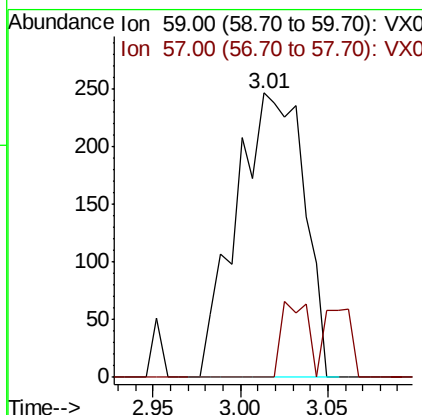
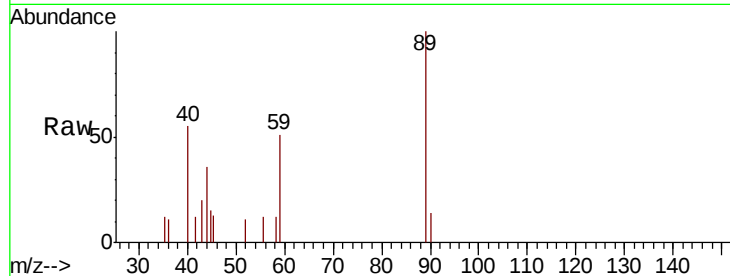




#11  
Tert butyl alcohol  
Concen: 1.095 ug/l  
RT: 3.01 min Scan# 305  
Delta R.T. -0.04 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

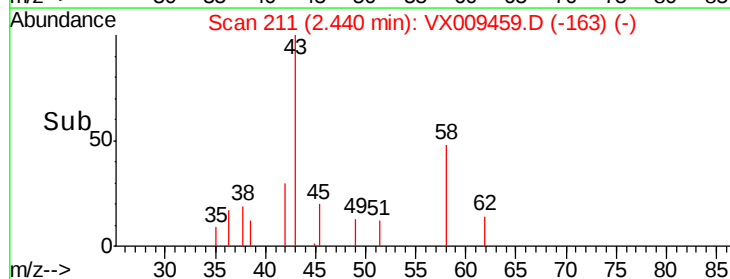
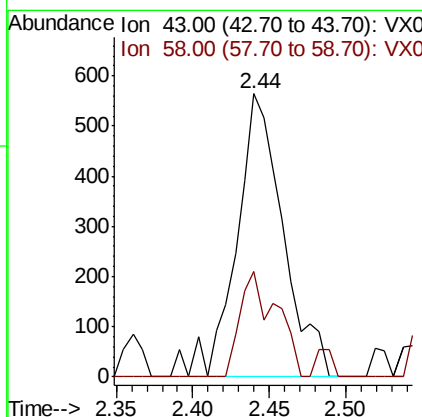
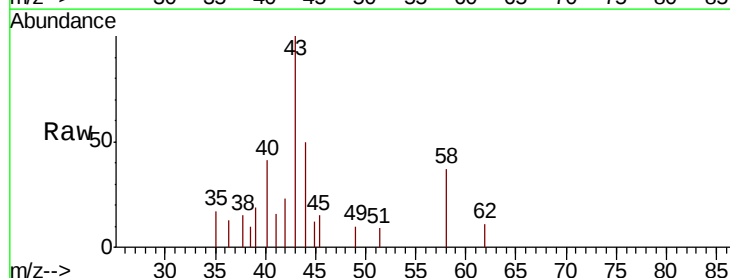
Instrument :  
MSVOA\_X  
ClientSampled :

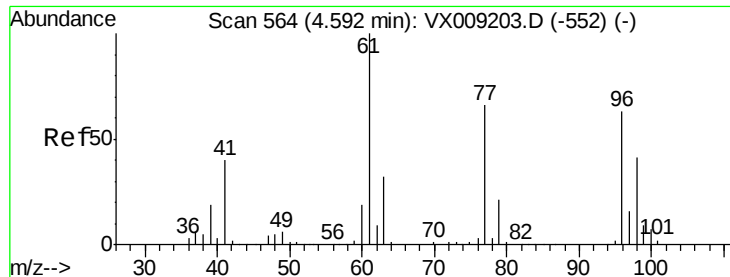
Tot Ion: 59 Resp: 664  
Ion Ratio Lower Upper  
59 100  
57 10.1 8.2 12.2



#16  
Acetone  
Concen: 0.842 ug/l  
RT: 2.44 min Scan# 211  
Delta R.T. -0.01 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Tgt Ion: 43 Resp: 1184  
Ion Ratio Lower Upper  
43 100  
58 37.2 24.9 37.3



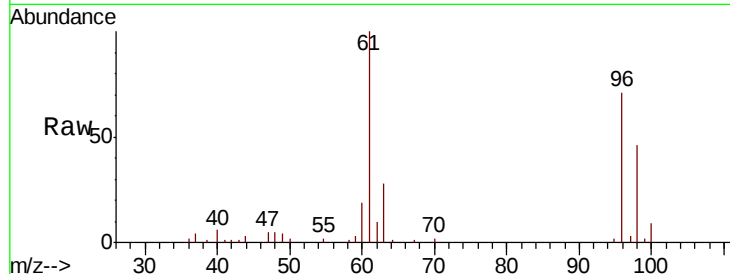


#27

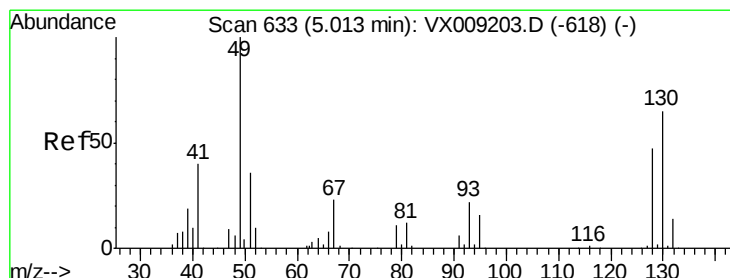
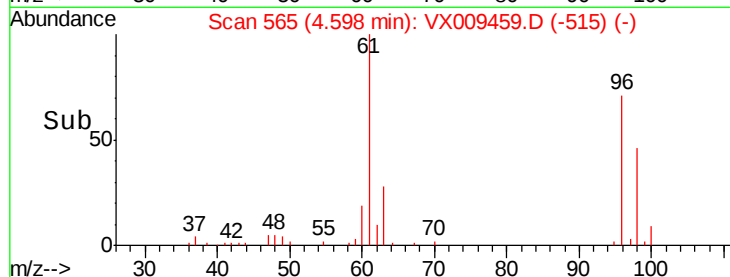
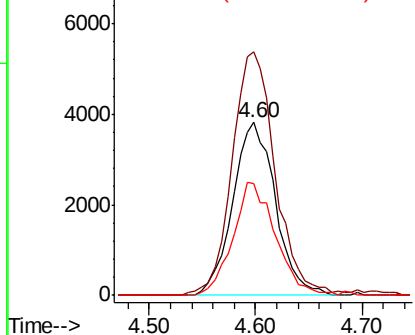
cis-1,2-Dichloroethene  
 Concen: 4.602 ug/l  
 RT: 4.60 min Scan# 565  
 Delta R.T. 0.01 min  
 Lab File: VX009459.D  
 Acq: 10 May 2019 04:13

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion: 96 Resp: 10727  
 Ion Ratio Lower Upper  
 96 100  
 61 142.3 0.0 324.0  
 98 64.9 0.0 130.4



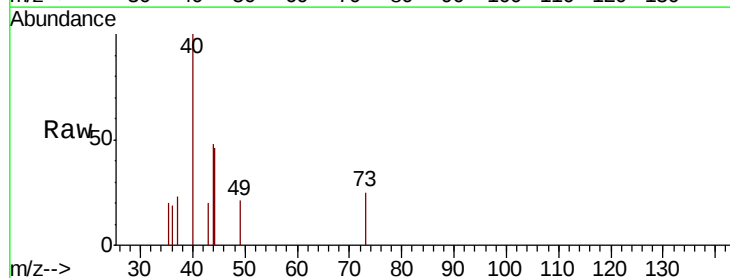
Abundance Ion 95.90 (95.60 to 96.60): VX0  
 Ion 60.90 (60.60 to 61.60): VX0  
 Ion 97.90 (97.60 to 98.60): VX0



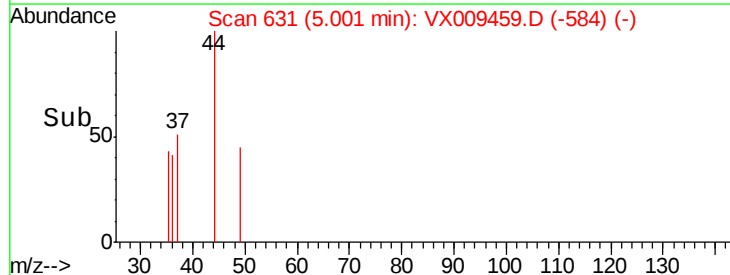
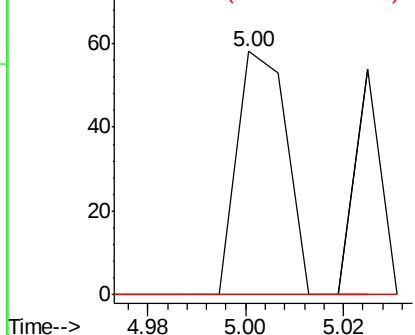
#28

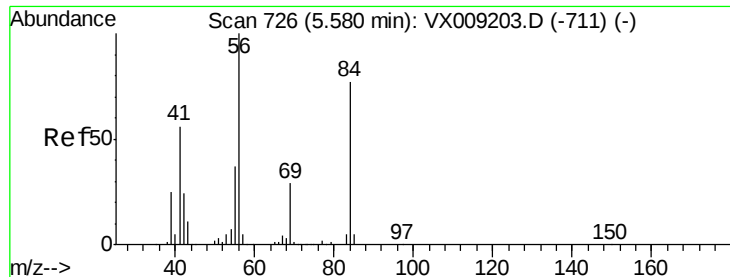
Bromochloromethane  
 Concen: Below Cal  
 RT: 5.00 min Scan# 631  
 Delta R.T. -0.01 min  
 Lab File: VX009459.D  
 Acq: 10 May 2019 04:13

Tgt Ion: 49 Resp: 41  
 Ion Ratio Lower Upper  
 49 100  
 129 0.0 0.0 3.8  
 130 0.0 51.2 76.8#



Abundance Ion 48.90 (48.60 to 49.60): VX0  
 Ion 128.80 (128.50 to 129.50): V  
 Ion 129.80 (129.50 to 130.50): V

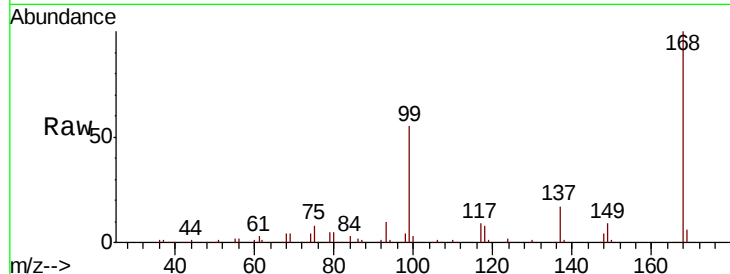




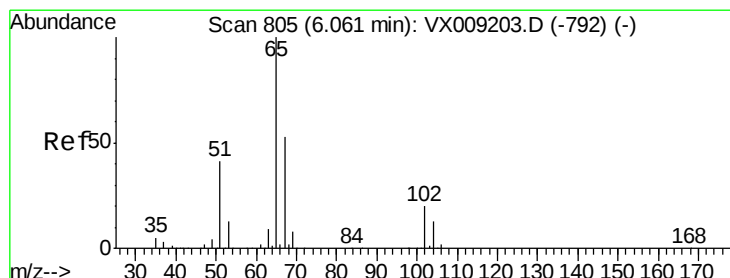
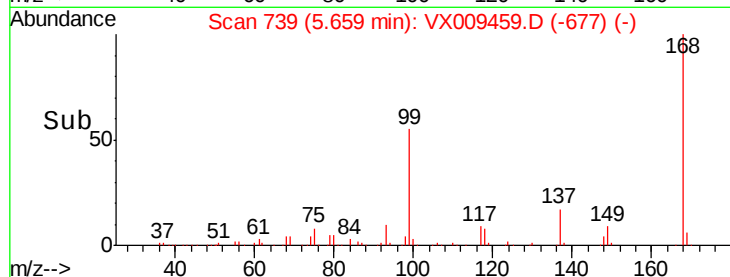
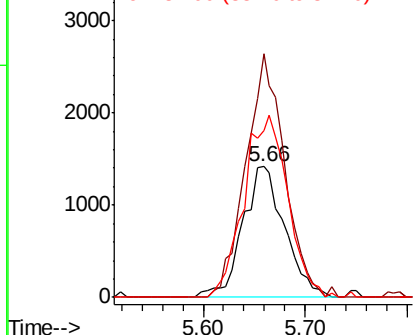
#31  
Cyclohexane  
Concen: 1.048 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. 0.08 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Instrument :  
MSVOA\_X  
ClientSampleId :

Tot Ion: 56 Resp: 4061  
Ion Ratio Lower Upper  
56 100  
69 186.4 23.4 35.0#  
84 128.2 61.9 92.9#

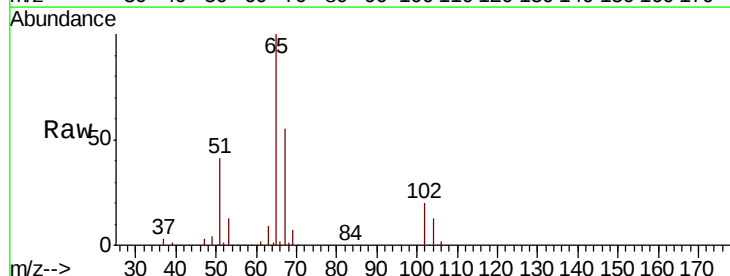


Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

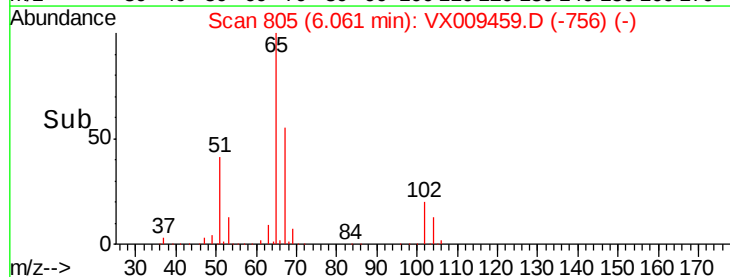
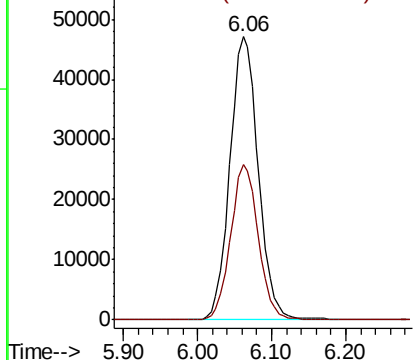


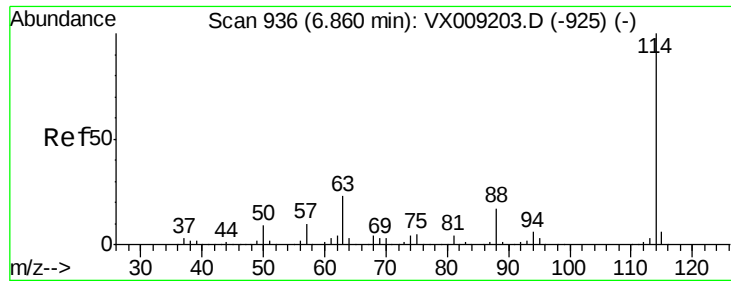
#33  
1,2-Dichloroethane-d4  
Concen: 47.867 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. -0.00 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Tgt Ion: 65 Resp: 125402  
Ion Ratio Lower Upper  
65 100  
67 53.7 0.0 106.6



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

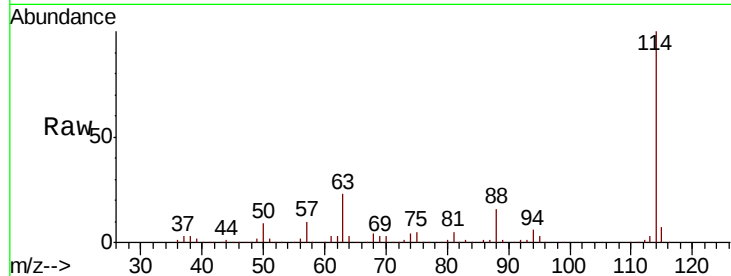




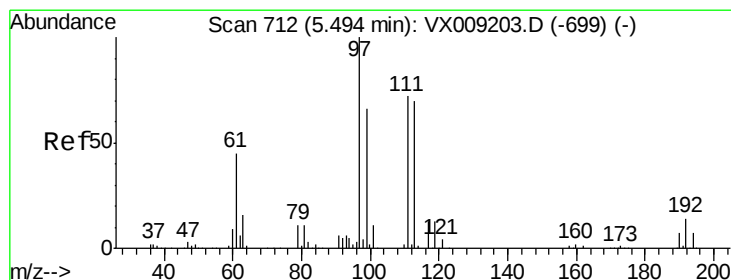
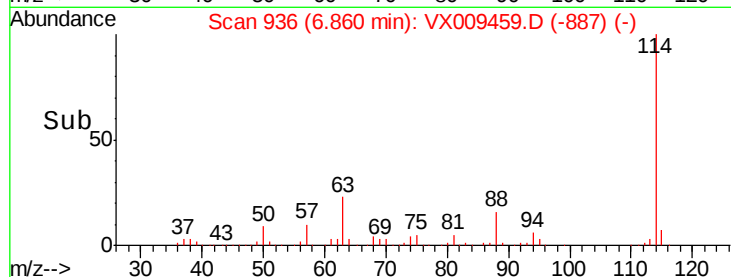
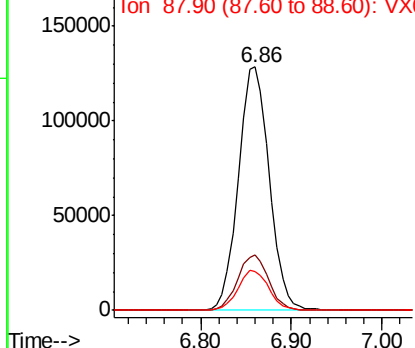
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX009459.D  
 Acq: 10 May 2019 04:13

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion:114 Resp: 303642  
 Ion Ratio Lower Upper  
 114 100  
 63 22.9 0.0 45.6  
 88 15.9 0.0 33.2

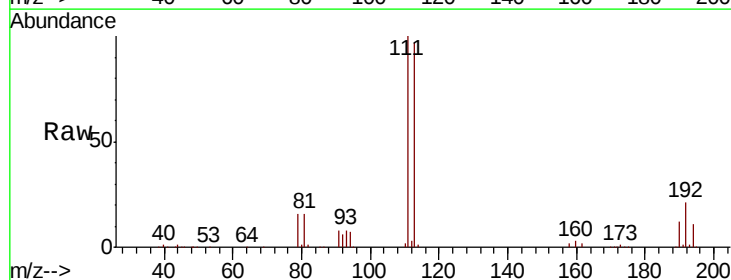


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

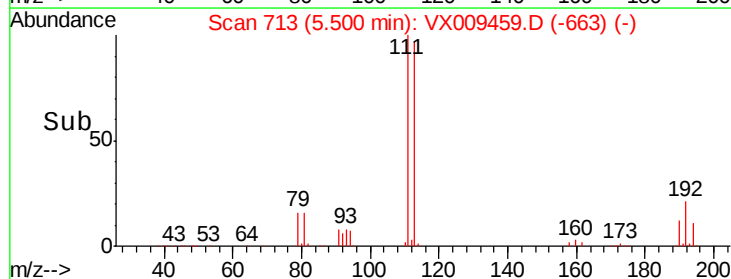
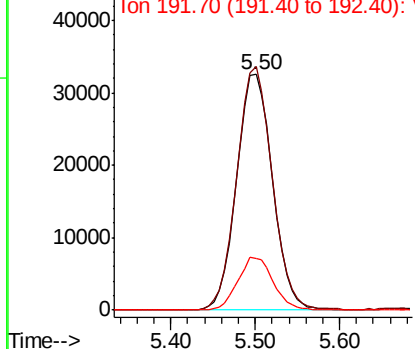


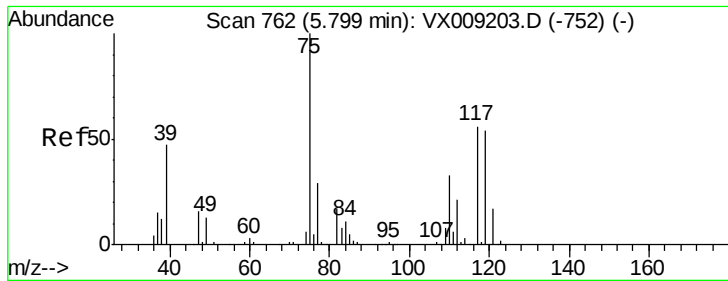
#35  
 Dibromofluoromethane  
 Concen: 49.368 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.01 min  
 Lab File: VX009459.D  
 Acq: 10 May 2019 04:13

Tgt Ion:113 Resp: 94235  
 Ion Ratio Lower Upper  
 113 100  
 111 101.6 82.8 124.2  
 192 22.0 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





#36

1,1-Dichloropropene

Concen: 5.288 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX009459.D

Acq: 10 May 2019 04:13

Instrument :

MSVOA\_X

ClientSampleId :

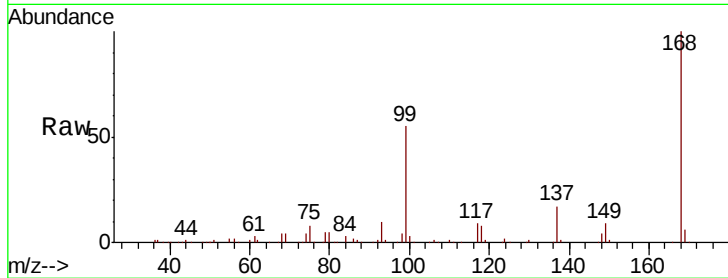
Tot Ion: 75 Resp: 14921

Ion Ratio Lower Upper

75 100

110 9.3 16.9 50.6#

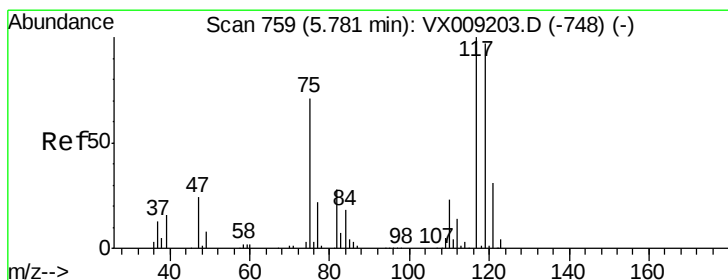
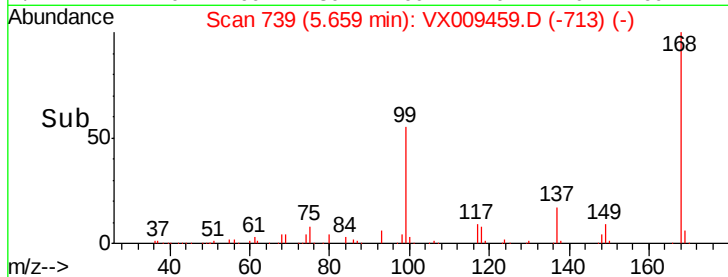
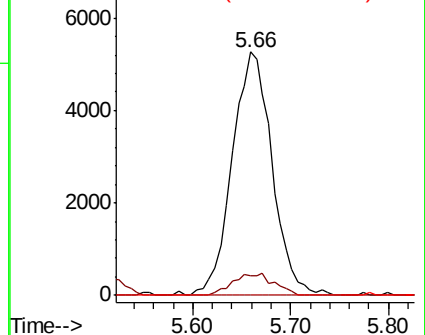
77 0.0 24.8 37.2#



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: 6.865 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.12 min

Lab File: VX009459.D

Acq: 10 May 2019 04:13

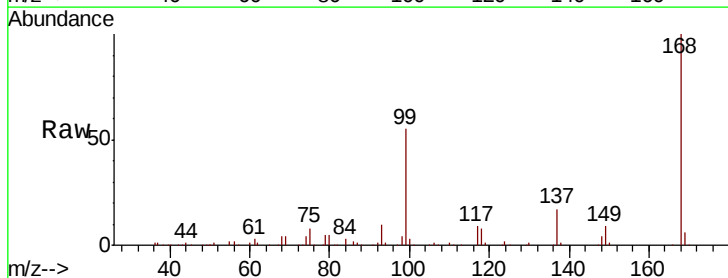
Tgt Ion:117 Resp: 17600

Ion Ratio Lower Upper

117 100

119 5.8 77.5 116.3#

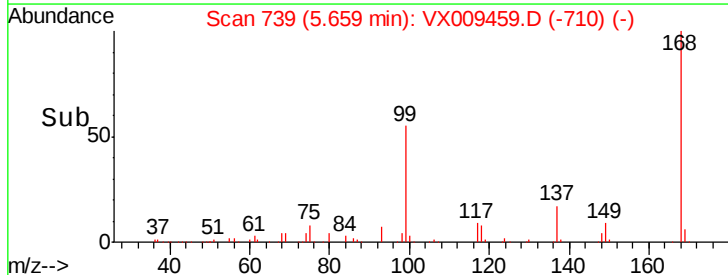
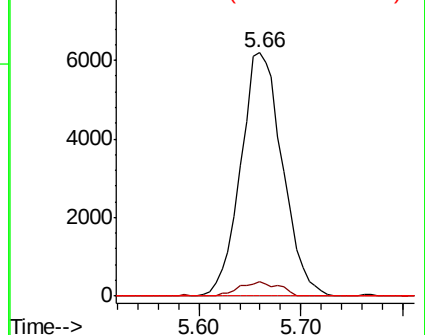
121 0.0 24.7 37.1#

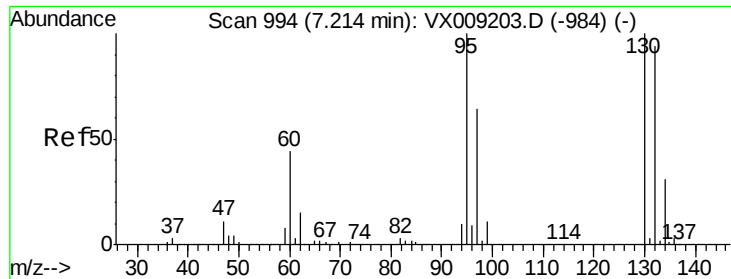


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V

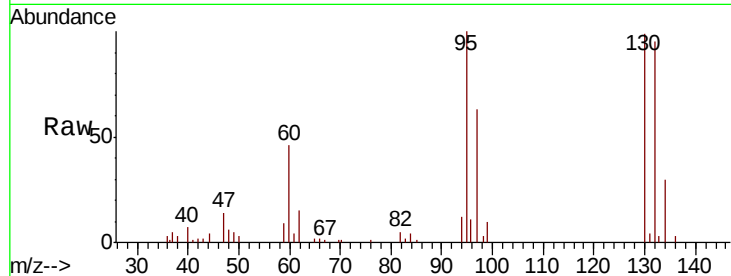




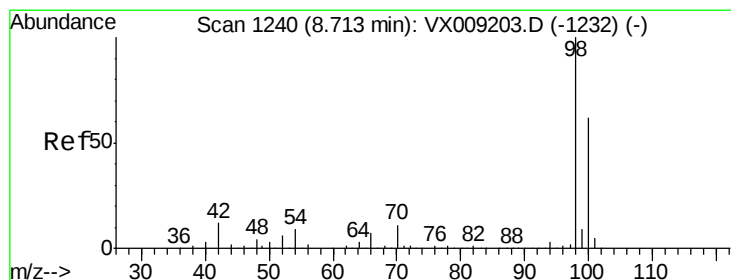
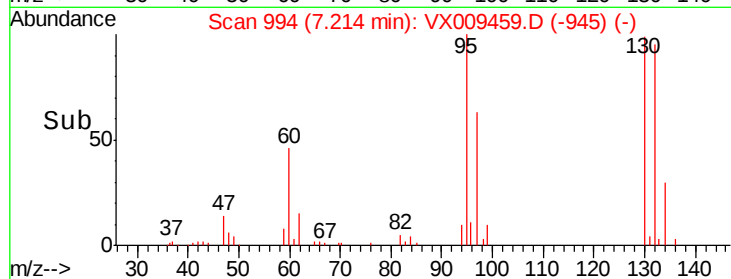
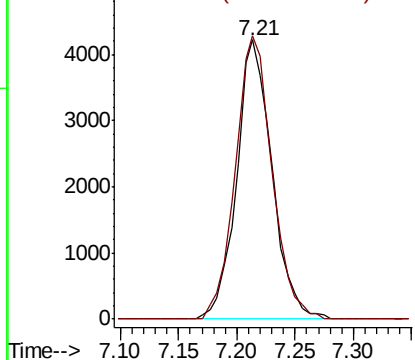
#44  
 Trichloroethene  
 Concen: 4.243 ug/l  
 RT: 7.21 min Scan# 994  
 Delta R.T. -0.00 min  
 Lab File: VX009459.D  
 Acq: 10 May 2019 04:13

Instrument :  
 MSVOA\_X  
 ClientSampled :

Tot Ion:130 Resp: 8957  
 Ion Ratio Lower Upper  
 130 100  
 95 101.3 0.0 199.2

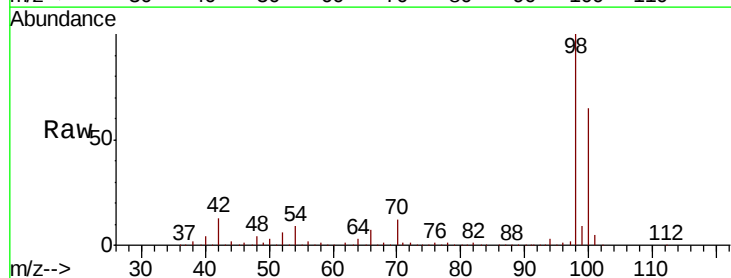


Abundance Ion 129.80 (129.50 to 130.50): V  
 Ion 94.90 (94.60 to 95.60): VX0

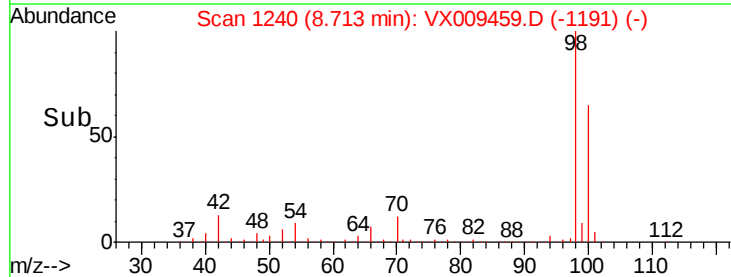
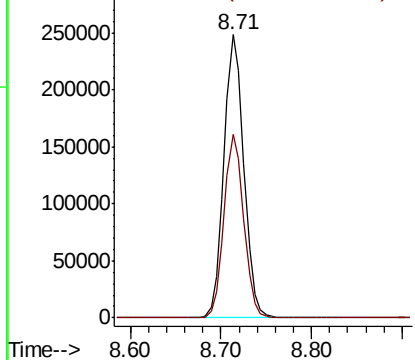


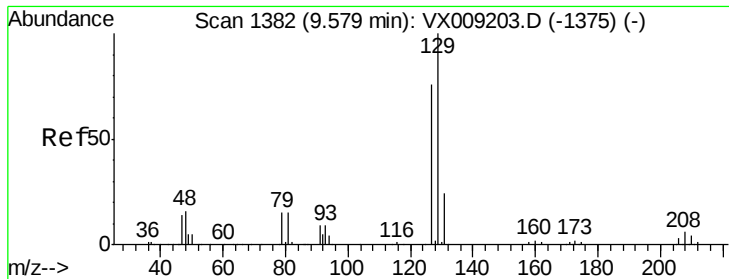
#50  
 Toluene-d8  
 Concen: 49.413 ug/l  
 RT: 8.71 min Scan# 1240  
 Delta R.T. -0.00 min  
 Lab File: VX009459.D  
 Acq: 10 May 2019 04:13

Tgt Ion: 98 Resp: 380793  
 Ion Ratio Lower Upper  
 98 100  
 100 64.1 51.2 76.8



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

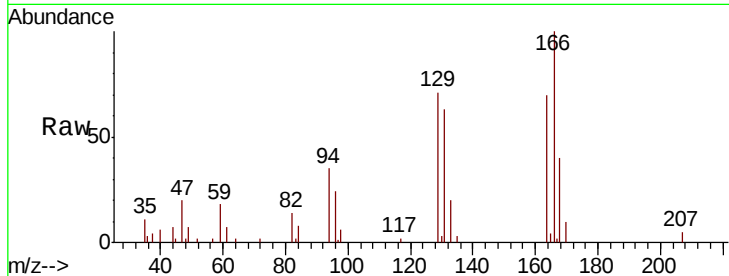




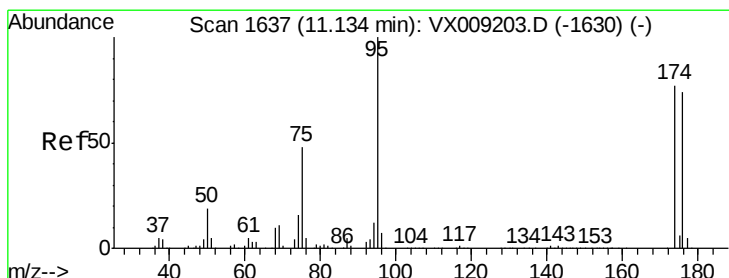
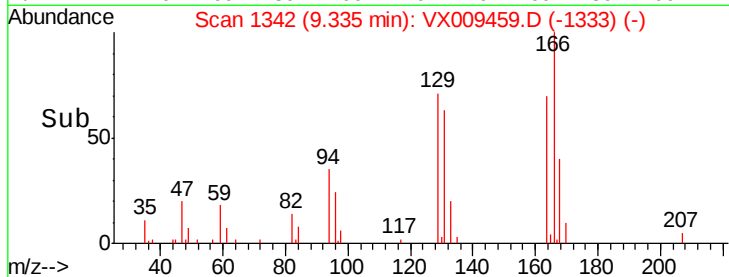
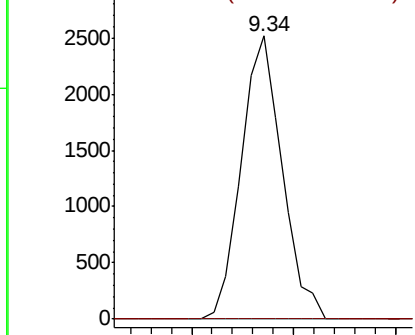
#60  
Dibromochloromethane  
Concen: 1.652 ug/l  
RT: 9.34 min Scan# 1342  
Delta R.T. -0.24 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:129 Resp: 3494  
Ion Ratio Lower Upper  
129 100  
127 0.0 38.4 115.1#

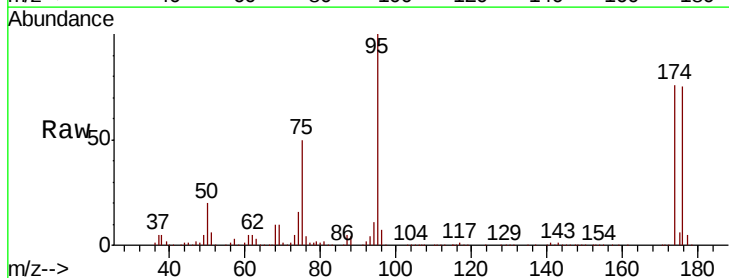


Abundance Ion 128.80 (128.50 to 129.50): V  
Ion 126.80 (126.50 to 127.50): V

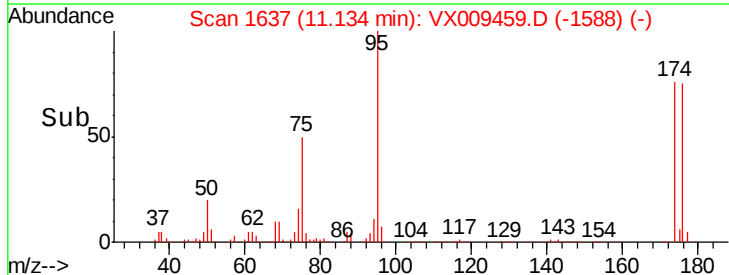
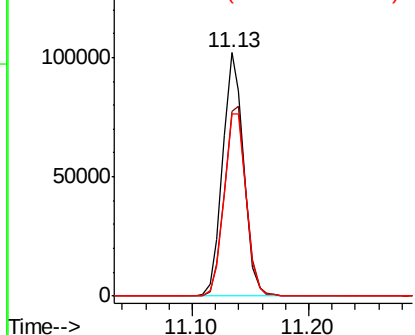


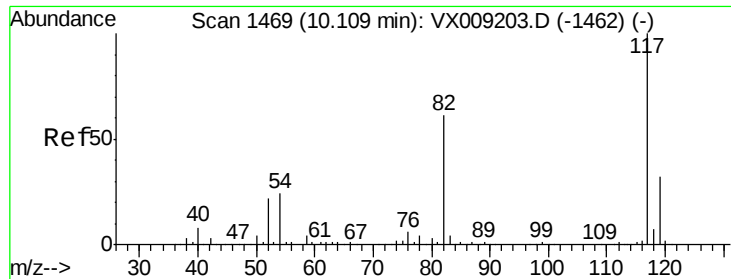
#62  
4-Bromofluorobenzene  
Concen: 45.100 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.00 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Tgt Ion: 95 Resp: 126289  
Ion Ratio Lower Upper  
95 100  
174 80.9 0.0 161.6  
176 79.0 0.0 159.2



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

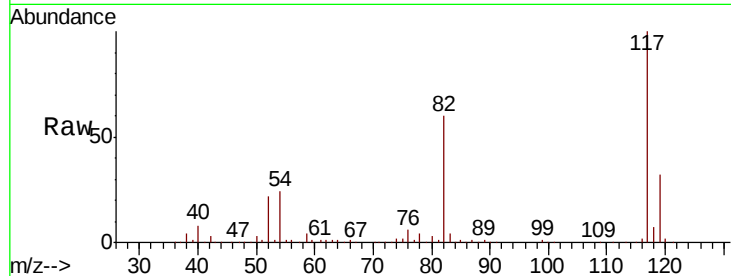




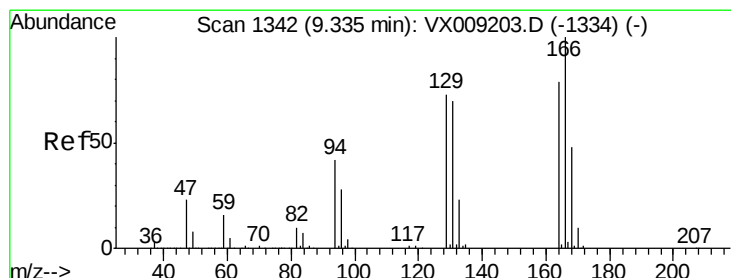
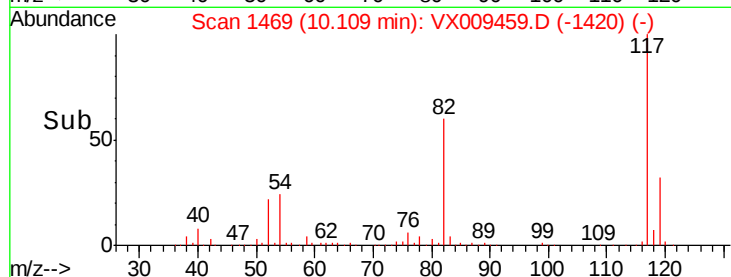
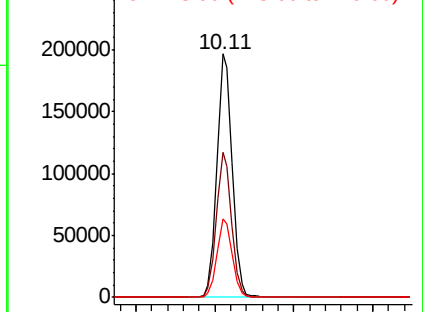
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. -0.00 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Instrument :  
MSVOA\_X  
ClientSampled :

Tot Ion:117 Resp: 266370  
Ion Ratio Lower Upper  
117 100  
82 59.7 48.8 73.2  
119 32.4 25.8 38.6

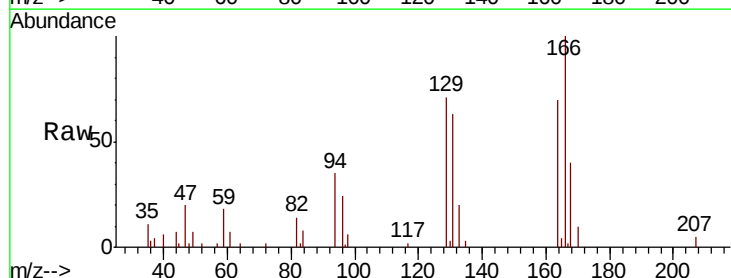


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

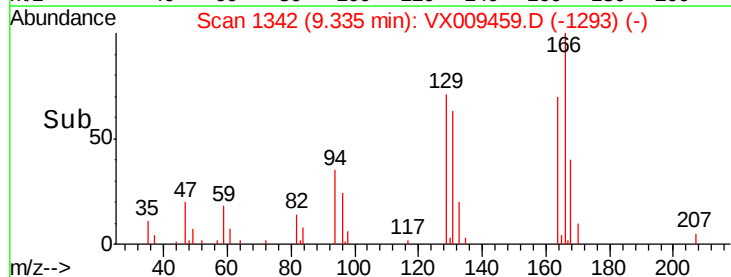
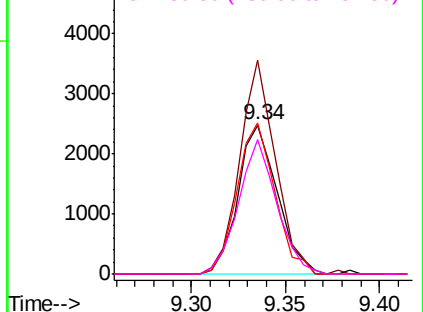


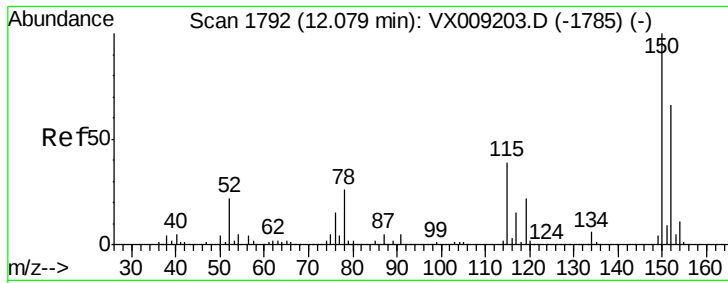
#64  
Tetrachloroethene  
Concen: 1.958 ug/l  
RT: 9.34 min Scan# 1342  
Delta R.T. -0.00 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Tgt Ion:164 Resp: 3578  
Ion Ratio Lower Upper  
164 100  
166 143.9 101.2 151.8  
129 101.8 74.3 111.5  
131 90.7 71.0 106.6



Abundance Ion 163.80 (163.50 to 164.50): V  
Ion 165.80 (165.50 to 166.50): V  
Ion 128.80 (128.50 to 129.50): V  
Ion 130.80 (130.50 to 131.50): V



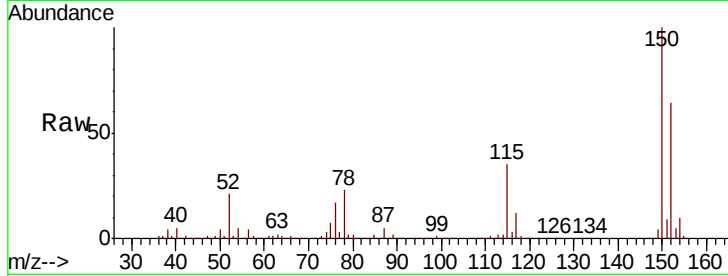


#72

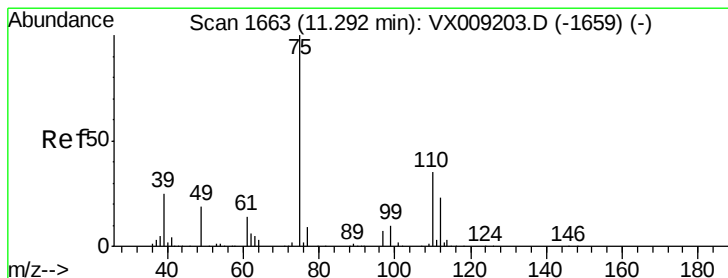
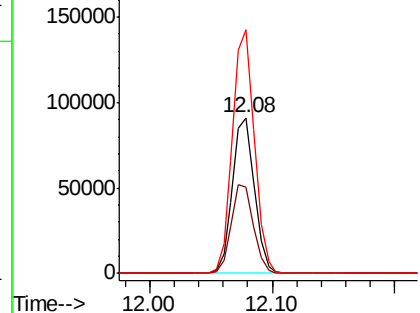
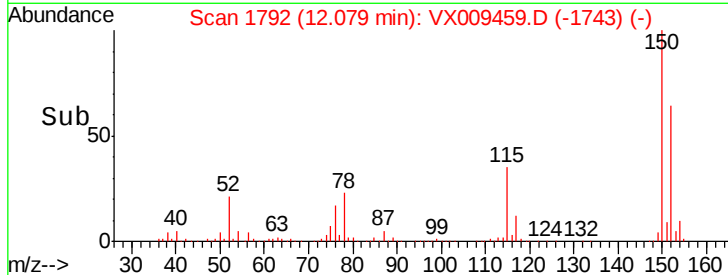
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. -0.00 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

Instrument :  
MSVOA\_X  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 57.7  | 41.2  | 123.6 |
| 150     | 156.4 | 0.0   | 346.4 |



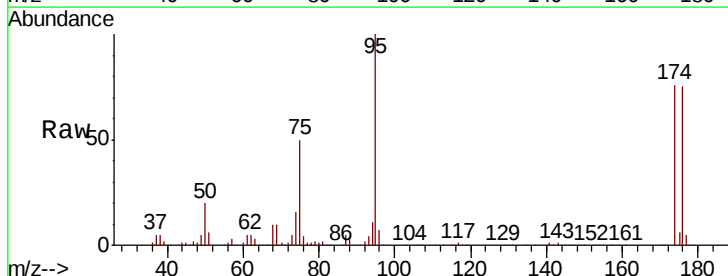
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



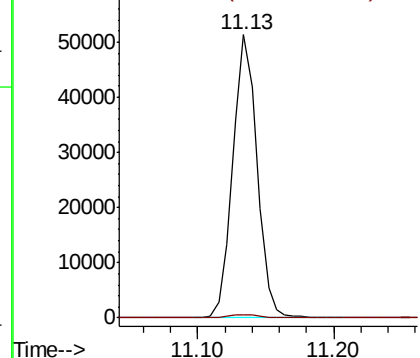
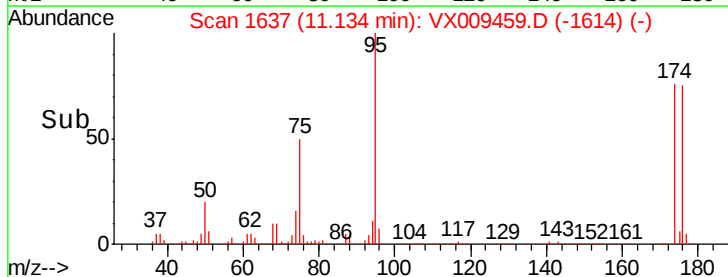
#76

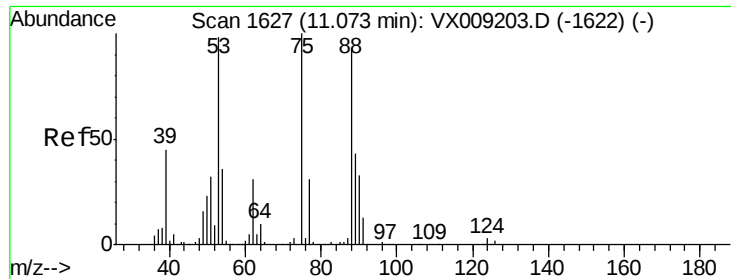
1,2,3-Trichloropropane  
Concen: 24.239 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.16 min  
Lab File: VX009459.D  
Acq: 10 May 2019 04:13

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.3   | 22.1  | 66.1  |



Abundance Ion 74.90 (74.60 to 75.60): VX0  
Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 62.019 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009459.D

Acq: 10 May 2019 04:13

Instrument :

MSVOA\_X

ClientSampleId :

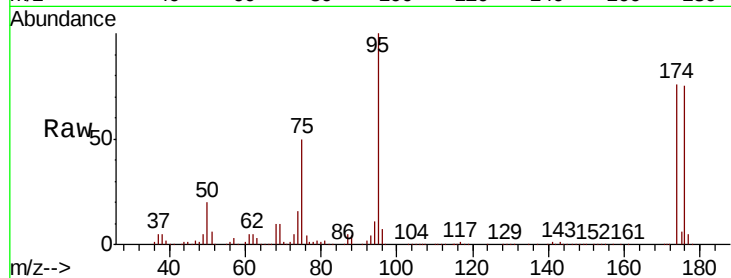
Tot Ion: 75 Resp: 63528

Ion Ratio Lower Upper

75 100

53 0.0 79.0 118.6#

89 0.0 34.7 52.1#



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

