

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX122718\  
 Data File : VX006832.D  
 Acq On : 27 Dec 2018 10:43  
 Operator : JC/MD  
 Sample : VX1227WBL01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :

Quant Time: Dec 28 03:17:13 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Dec 19 15:20:58 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 714073   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 1054403  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 951574   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 476770   | 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   | 356552   | 46.33 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.66% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 325271   | 48.78 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.56% |          |
| 50) Toluene-d8              | 8.71  | 98   | 1232969  | 49.05 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.10% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 439036   | 47.69 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.38% |          |

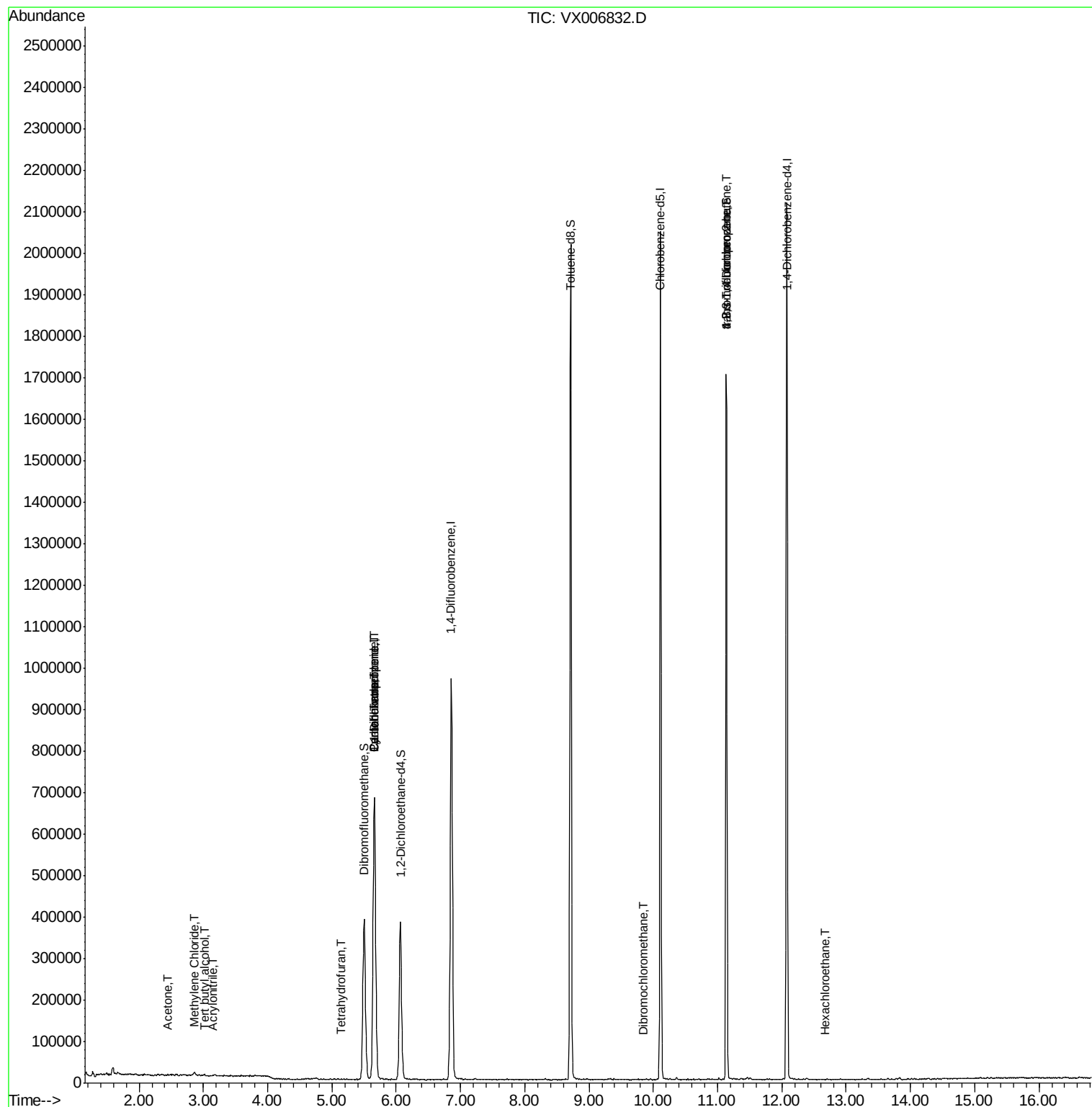
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 1.66  | 94   | 1105     | Below Cal | #      | 77     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 1883     | 1.096     | ug/l   | 98     |
| 15) Acrylonitrile              | 3.14  | 53   | 1126     | 0.295     | ug/l # | 29     |
| 16) Acetone                    | 2.44  | 43   | 1723     | 0.487     | ug/l   | 89     |
| 20) Methylene Chloride         | 2.86  | 84   | 3992     | 0.546     | ug/l   | 89     |
| 28) Bromochloromethane         | 5.04  | 49   | 345      | Below Cal | #      | 76     |
| 29) Tetrahydrofuran            | 5.15  | 42   | 845      | 0.258     | ug/l # | 38     |
| 31) Cyclohexane                | 5.66  | 56   | 11306    | 1.061     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 44126    | 5.053     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 64475    | 7.597     | ug/l # | 14     |
| 49) 1,4-Dioxane                | 7.73  | 88   | 204      | Below Cal | #      | 48     |
| 60) Dibromochloromethane       | 9.84  | 129  | 24       | 2.327     | ug/l   | 99     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 206328   | 23.287    | ug/l # | 40     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 206328   | 69.101    | ug/l # | 10     |
| 90) Hexachloroethane           | 12.67 | 117  | 51       | 3.304     | ug/l   | 87     |

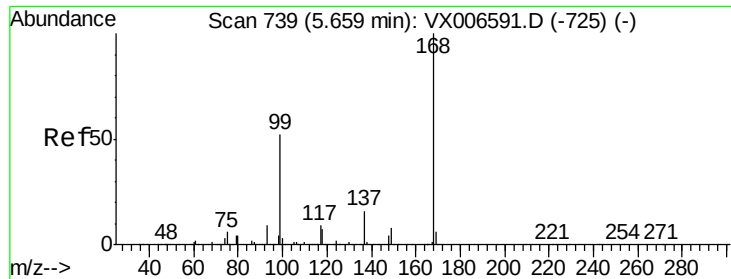
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX122718\  
Data File : VX006832.D  
Acq On : 27 Dec 2018 10:43  
Operator : JC/MD  
Sample : VX1227WBL01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :

Quant Time: Dec 28 03:17:13 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X121818W.M  
Quant Title : SW846 8260  
QLast Update : Wed Dec 19 15:20:58 2018  
Response via : Initial Calibration

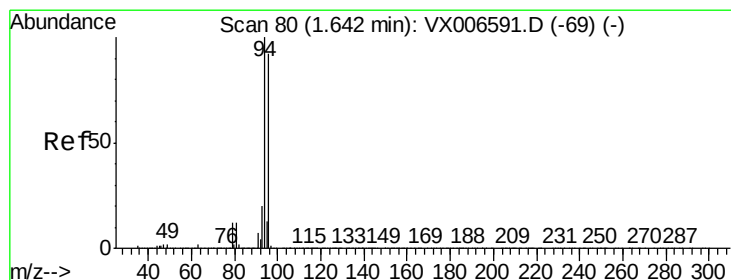
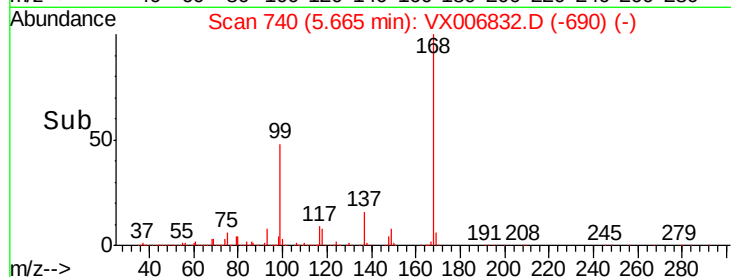
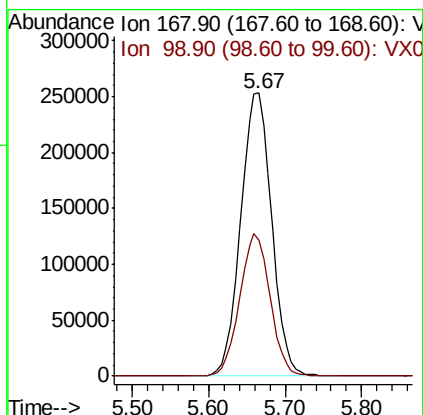
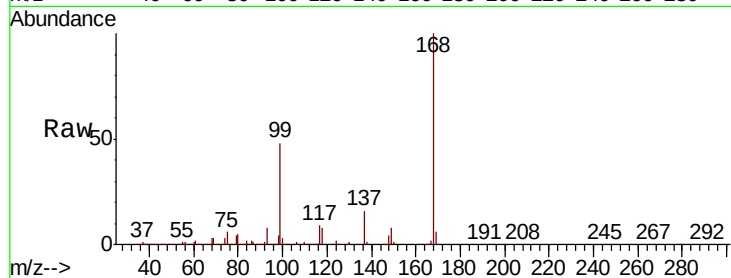




#1  
Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. 0.01 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

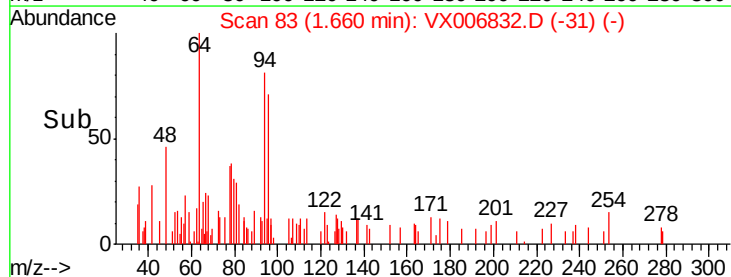
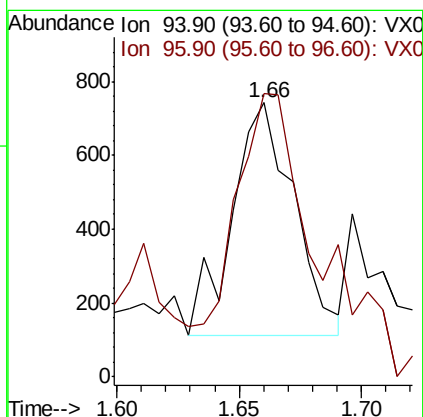
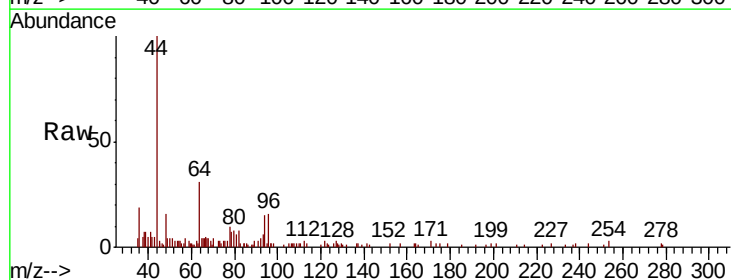
Instrument :  
MSVOA\_X  
ClientSampleId :

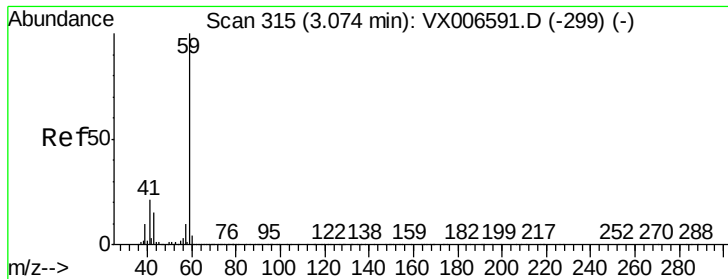
Tot Ion:168 Resp: 714073  
Ion Ratio Lower Upper  
168 100  
99 48.0 41.8 62.8



#5  
Bromomethane  
Concen: Below Cal  
RT: 1.66 min Scan# 83  
Delta R.T. 0.02 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

Tgt Ion: 94 Resp: 1105  
Ion Ratio Lower Upper  
94 100  
96 113.7 73.4 110.2#



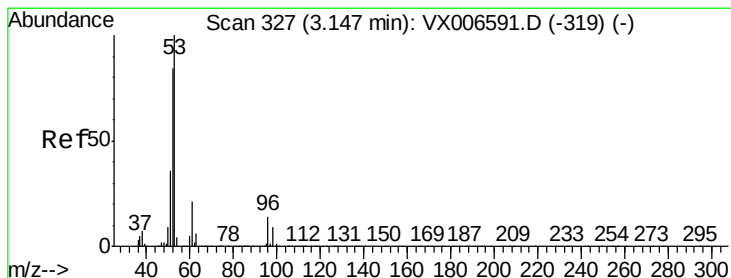
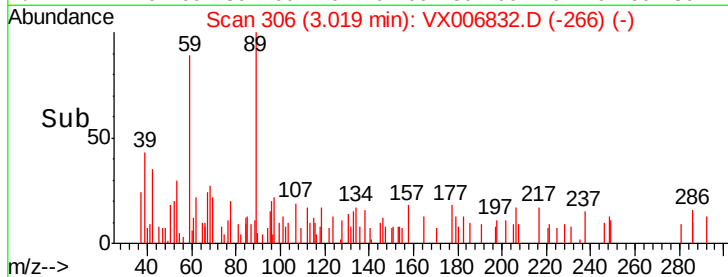
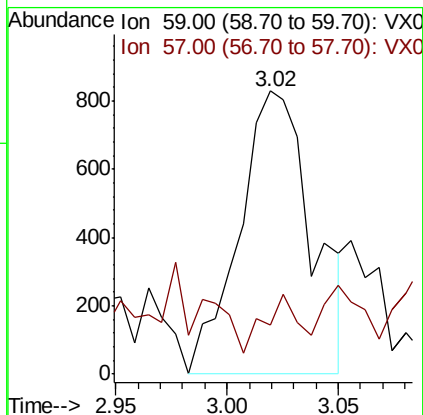
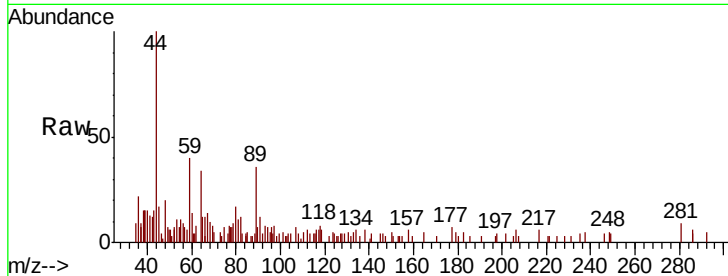


#11

Tert butyl alcohol  
 Concen: 1.096 ug/l  
 RT: 3.02 min Scan# 306  
 Delta R.T. -0.05 min  
 Lab File: VX006832.D  
 Acq: 27 Dec 2018 10:43

Instrument :  
 MSVOA\_X  
 ClientSampled :

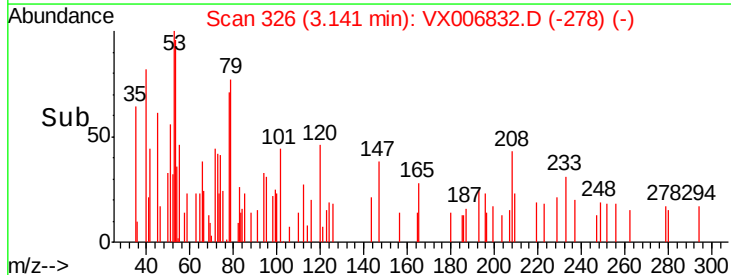
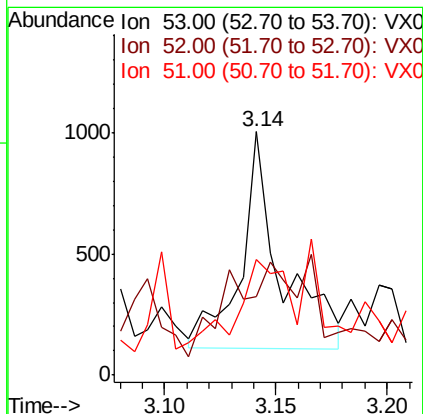
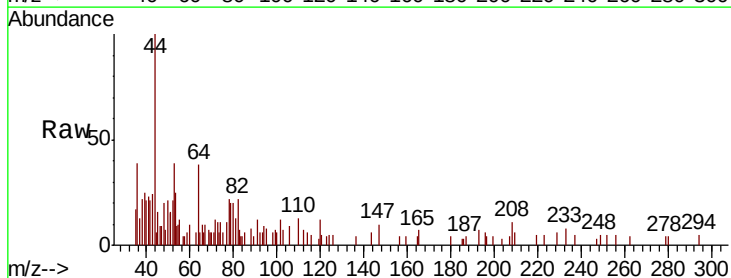
Tot Ion: 59 Resp: 1883  
 Ion Ratio Lower Upper  
 59 100  
 57 9.9 8.5 12.7

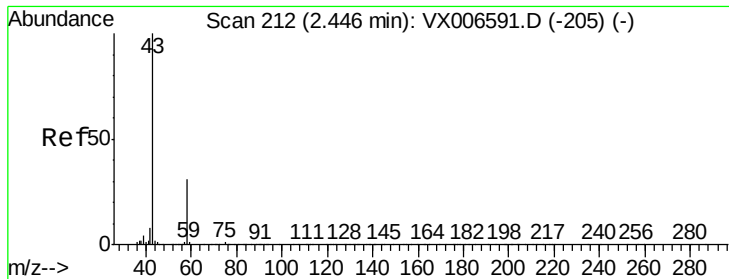


#15

Acrylonitrile  
 Concen: 0.295 ug/l  
 RT: 3.14 min Scan# 326  
 Delta R.T. -0.01 min  
 Lab File: VX006832.D  
 Acq: 27 Dec 2018 10:43

Tgt Ion: 53 Resp: 1126  
 Ion Ratio Lower Upper  
 53 100  
 52 0.0 66.0 99.0#  
 51 49.8 28.6 42.8#

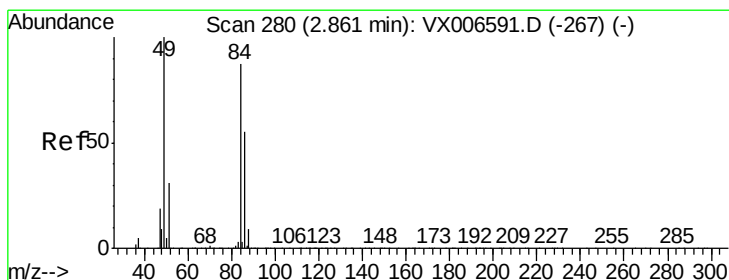
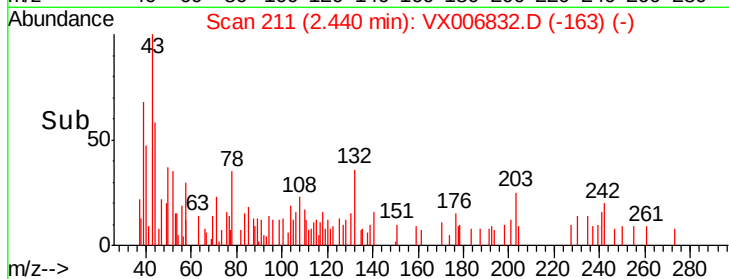
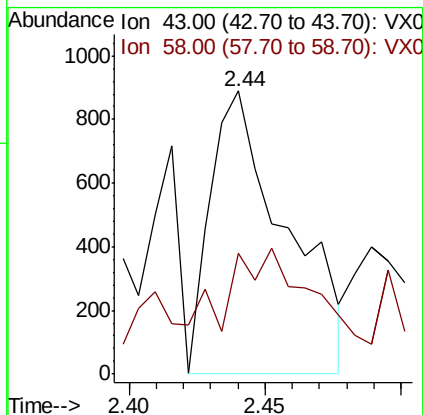
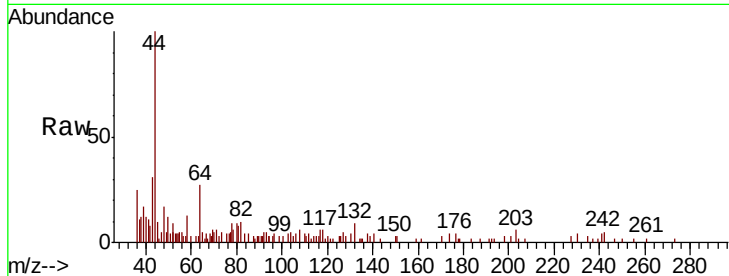




#16  
Acetone  
Concen: 0.487 ug/l  
RT: 2.44 min Scan# 211  
Delta R.T. -0.01 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

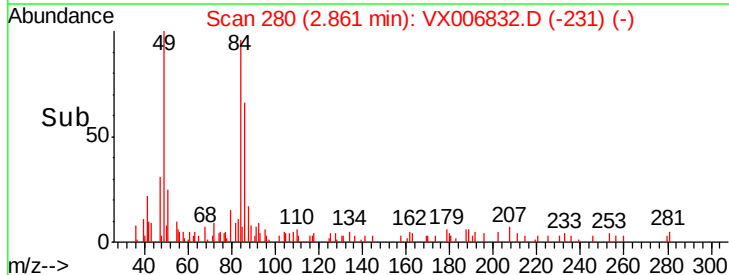
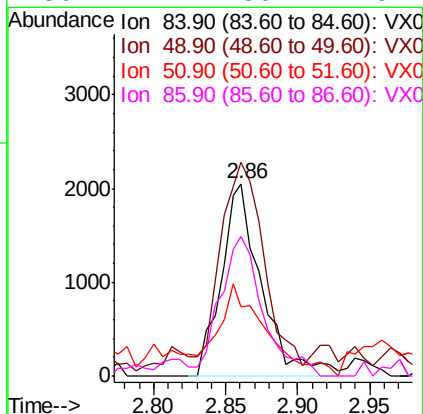
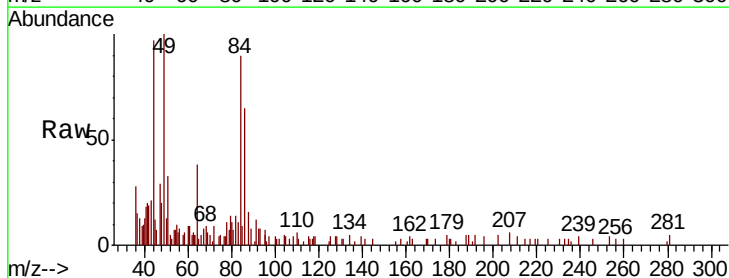
Instrument :  
MSVOA\_X  
ClientSampled :

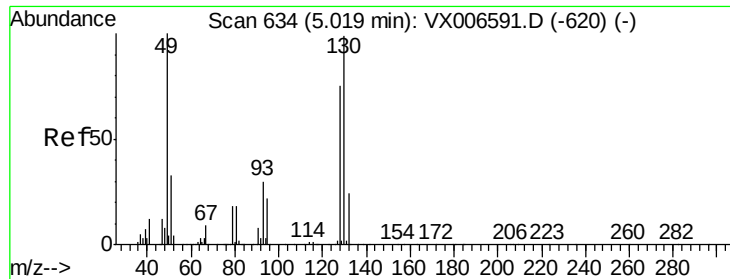
Tot Ion: 43 Resp: 1723  
Ion Ratio Lower Upper  
43 100  
58 25.2 25.0 37.6



#20  
Methylene Chloride  
Concen: 0.546 ug/l  
RT: 2.86 min Scan# 280  
Delta R.T. 0.00 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

Tgt Ion: 84 Resp: 3992  
Ion Ratio Lower Upper  
84 100  
49 101.1 91.8 137.6  
51 36.1 28.5 42.7  
86 72.7 50.2 75.2





#28

Bromochloromethane

Concen: Below Cal

RT: 5.04 min Scan# 637

Delta R.T. 0.02 min

Lab File: VX006832.D

Acq: 27 Dec 2018 10:43

Instrument :

MSVOA\_X

ClientSampled :

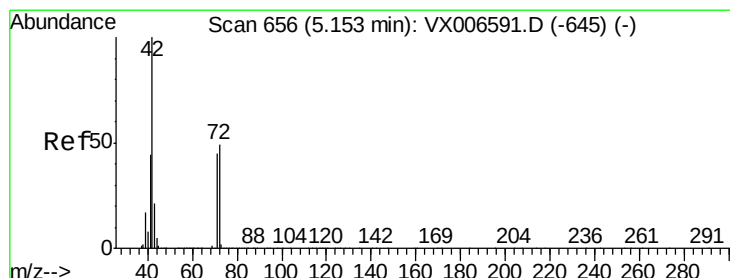
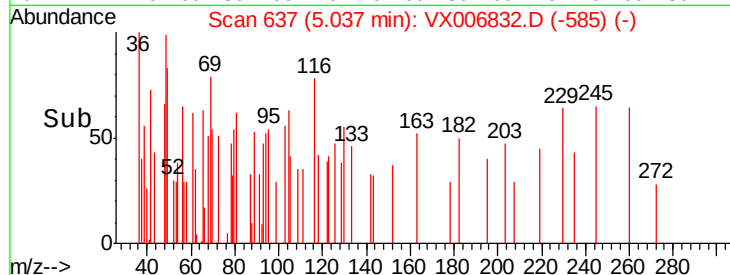
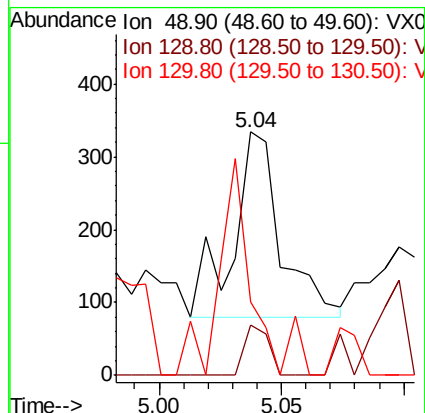
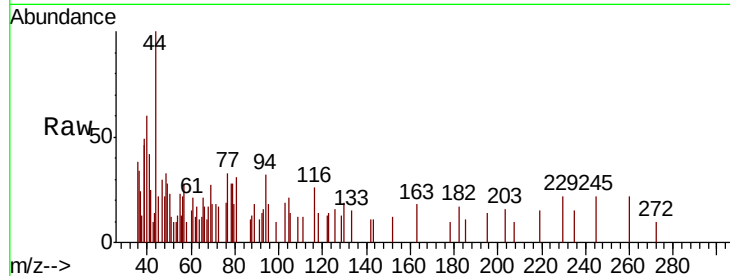
Tot Ion: 49 Resp: 345

Ion Ratio Lower Upper

49 100

129 13.3 0.0 5.4#

130 73.6 77.7 116.5#



#29

Tetrahydrofuran

Concen: 0.258 ug/l

RT: 5.15 min Scan# 656

Delta R.T. 0.00 min

Lab File: VX006832.D

Acq: 27 Dec 2018 10:43

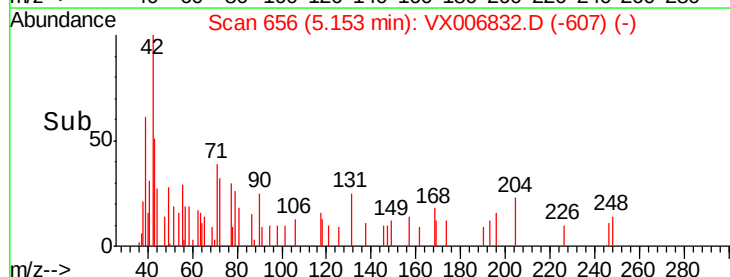
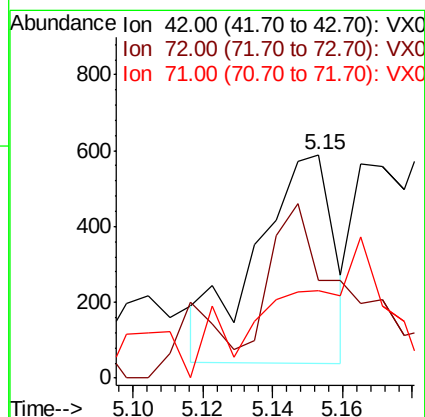
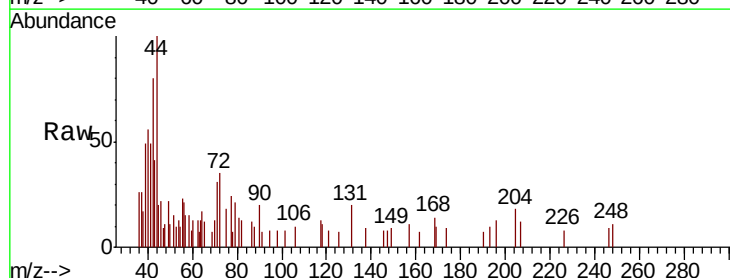
Tgt Ion: 42 Resp: 845

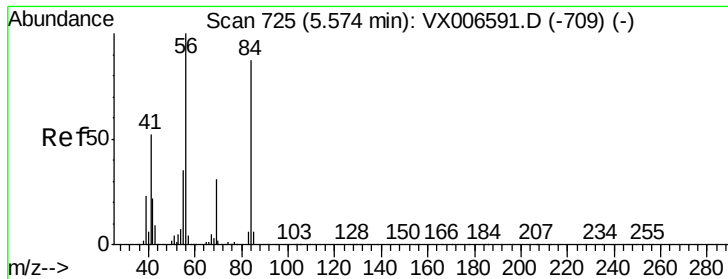
Ion Ratio Lower Upper

42 100

72 91.0 38.9 58.3#

71 86.3 36.2 54.4#

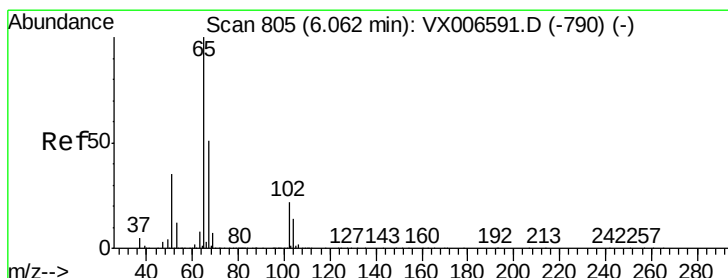
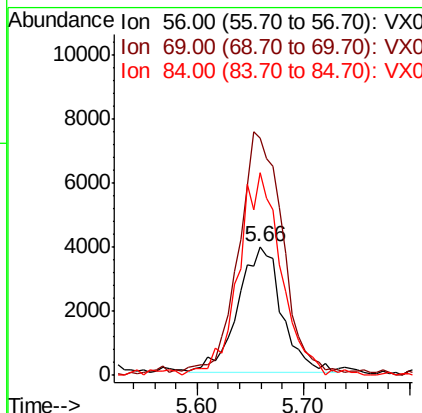
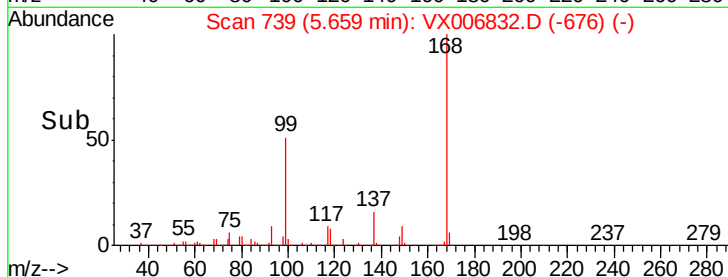
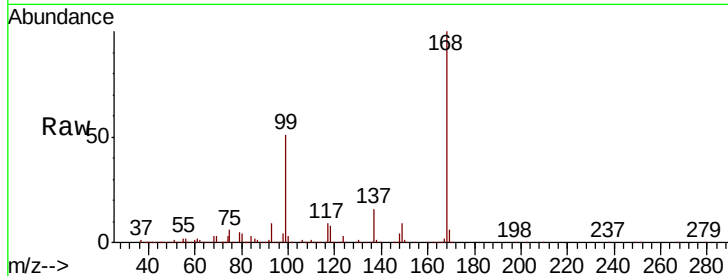




#31  
Cyclohexane  
Concen: 1.061 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. 0.09 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

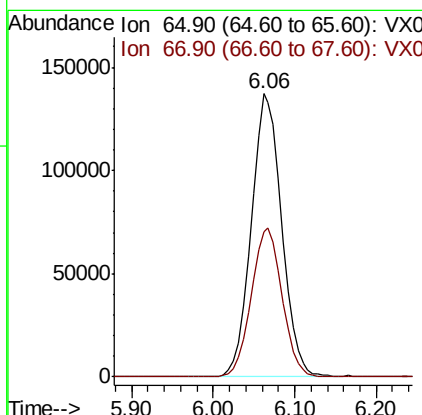
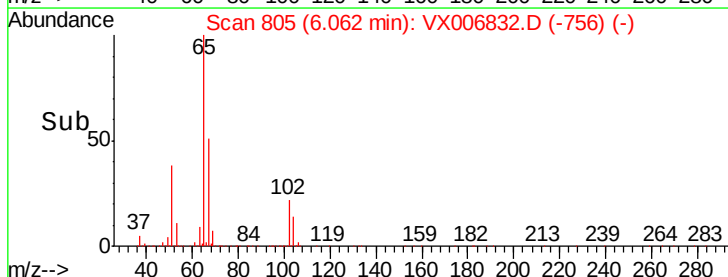
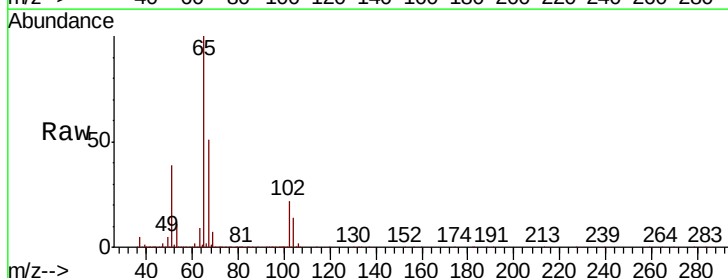
Instrument :  
MSVOA\_X  
ClientSampleId :

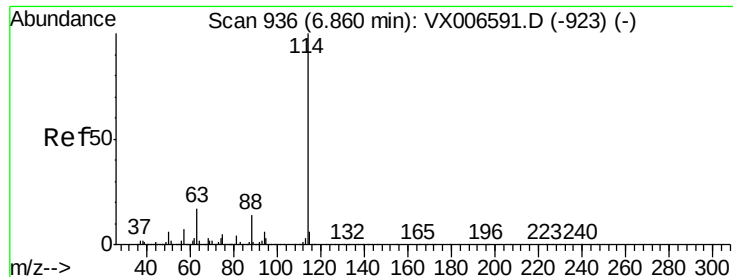
Tot Ion: 56 Resp: 11306  
Ion Ratio Lower Upper  
56 100  
69 185.6 24.4 36.6#  
84 160.1 70.0 105.0#



#33  
1,2-Dichloroethane-d4  
Concen: 46.330 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. 0.00 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

Tgt Ion: 65 Resp: 356552  
Ion Ratio Lower Upper  
65 100  
67 53.5 0.0 105.0

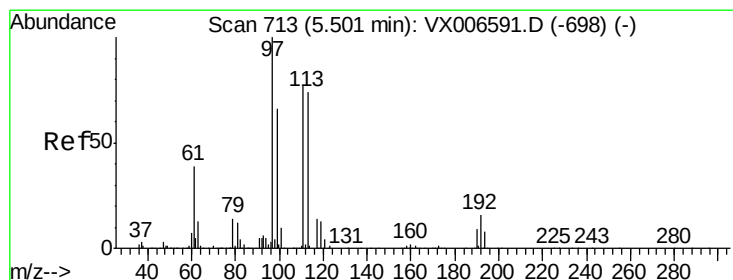
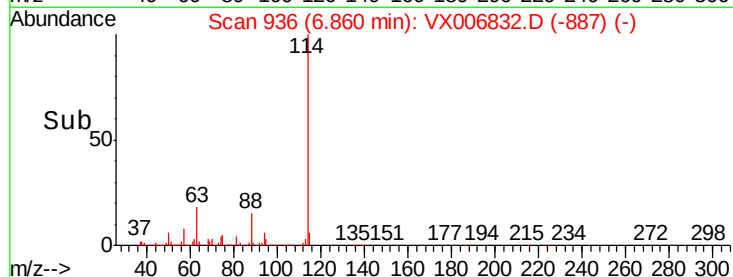
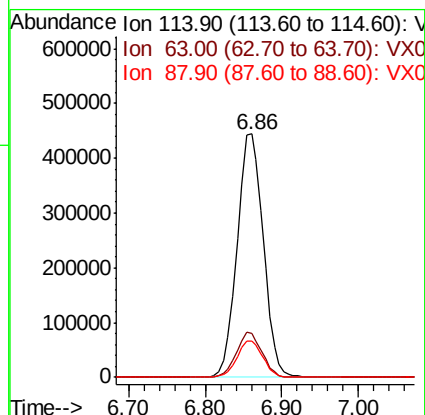
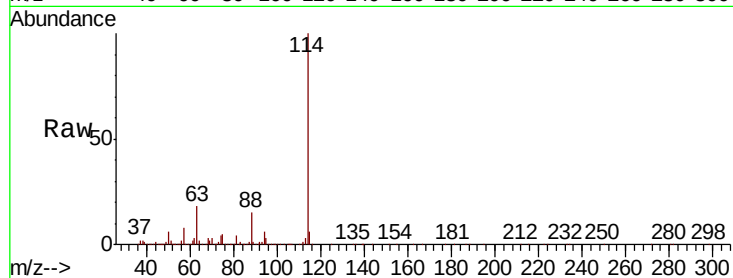




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX006832.D  
 Acq: 27 Dec 2018 10:43

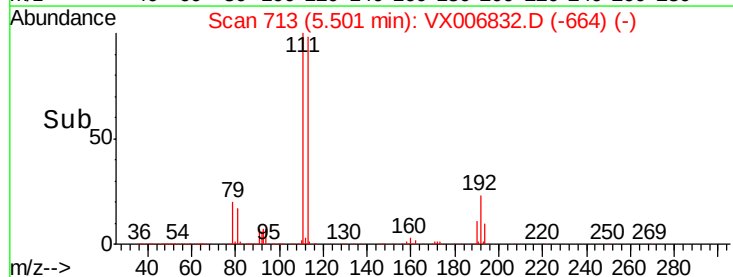
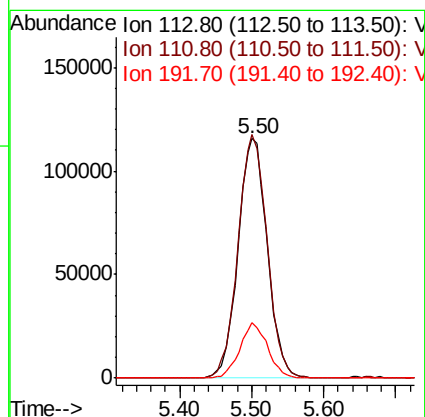
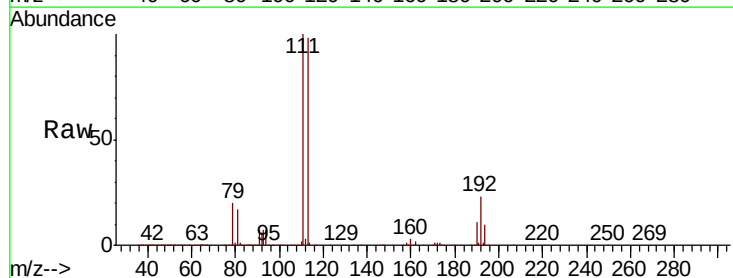
Instrument :  
 MSVOA\_X  
 ClientSampleId :

Tot Ion:114 Resp: 1054403  
 Ion Ratio Lower Upper  
 114 100  
 63 18.0 0.0 34.8  
 88 14.7 0.0 28.8

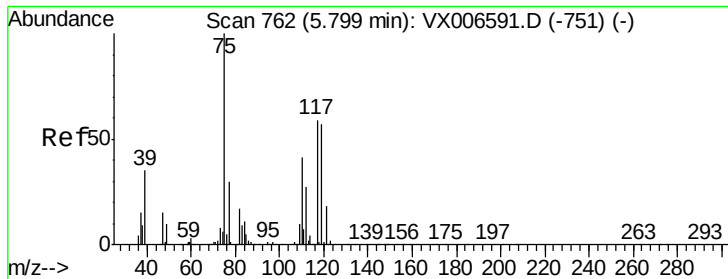


#35  
 Dibromofluoromethane  
 Concen: 48.782 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.00 min  
 Lab File: VX006832.D  
 Acq: 27 Dec 2018 10:43

Tgt Ion:113 Resp: 325271  
 Ion Ratio Lower Upper  
 113 100  
 111 101.4 81.6 122.4  
 192 21.9 16.7 25.1



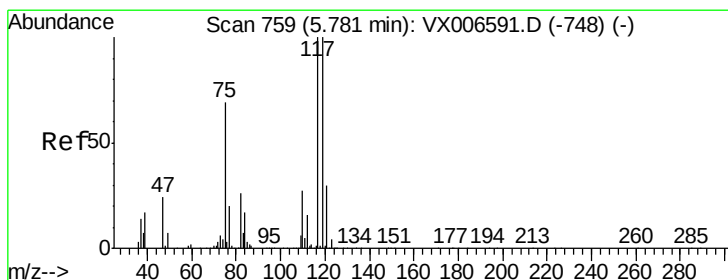
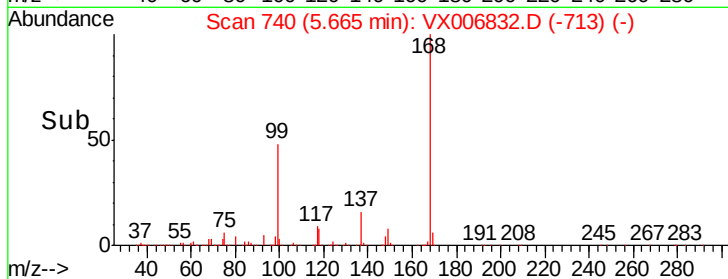
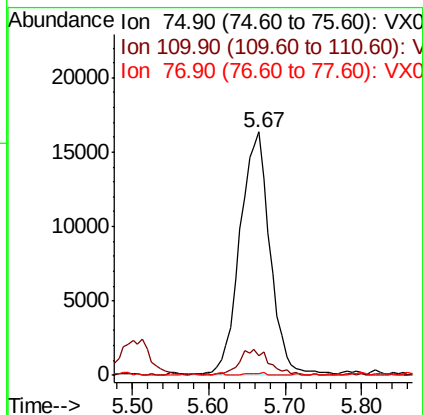
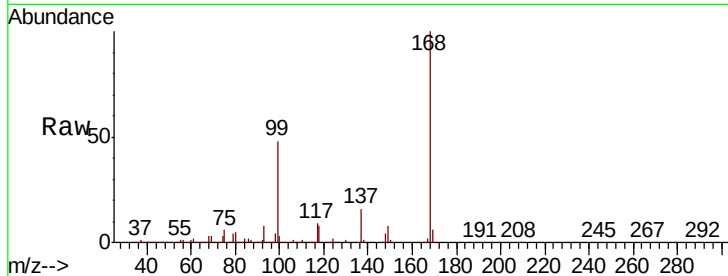




#36  
 1,1-Dichloropropene  
 Concen: 5.053 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.13 min  
 Lab File: VX006832.D  
 Acq: 27 Dec 2018 10:43

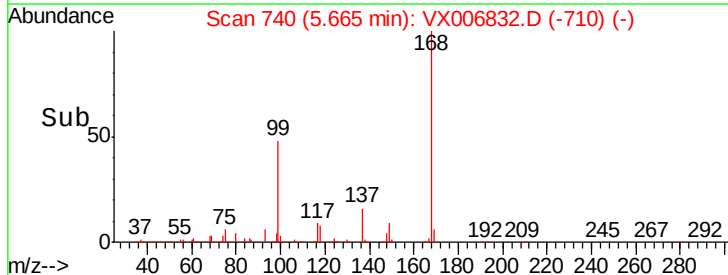
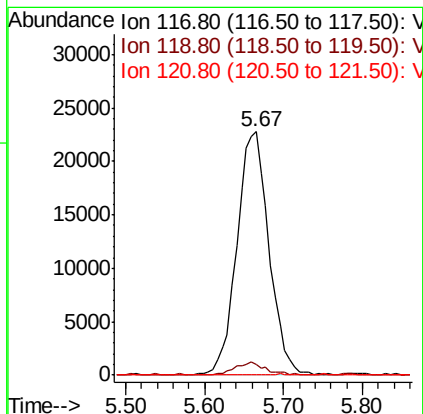
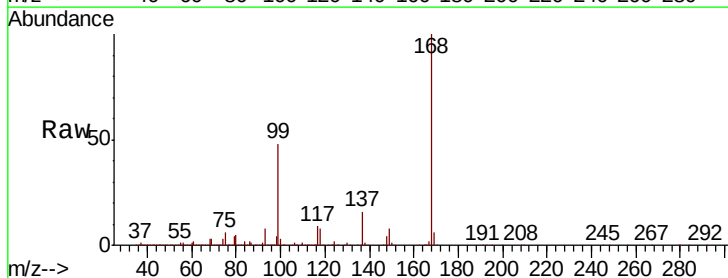
Instrument :  
 MSVOA\_X  
 ClientSampleId :

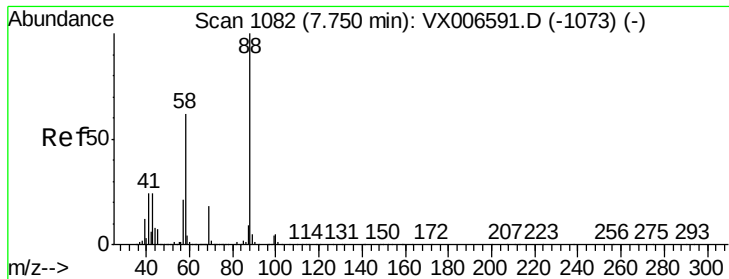
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 10.7  | 20.2  | 60.5# |
| 77      | 0.5   | 24.8  | 37.2# |



#38  
 Carbon Tetrachloride  
 Concen: 7.597 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.12 min  
 Lab File: VX006832.D  
 Acq: 27 Dec 2018 10:43

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.4   | 79.4  | 119.2# |
| 121     | 0.4   | 24.0  | 36.0#  |

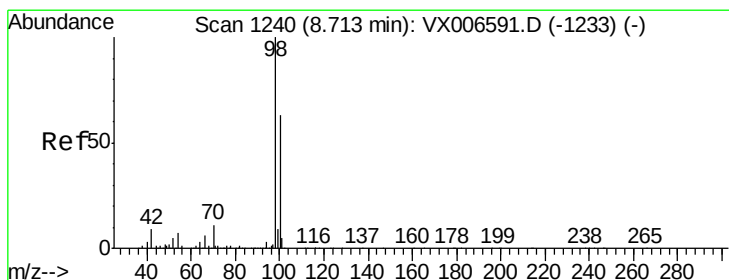
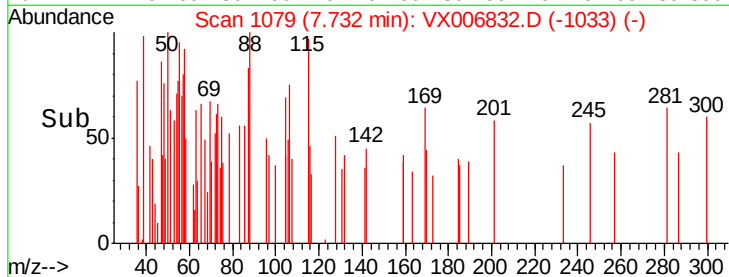
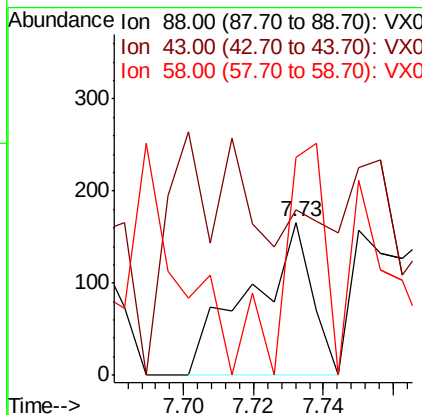
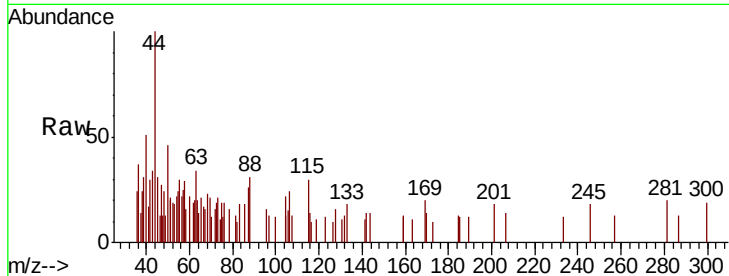




#49  
1,4-Dioxane  
Concen: Below Cal  
RT: 7.73 min Scan# 1079  
Delta R.T. -0.02 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

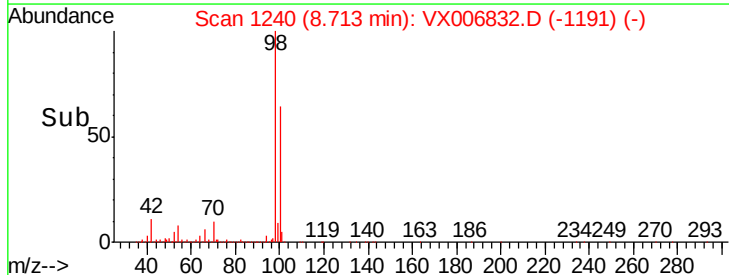
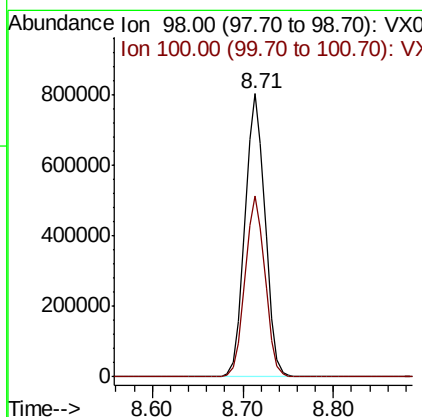
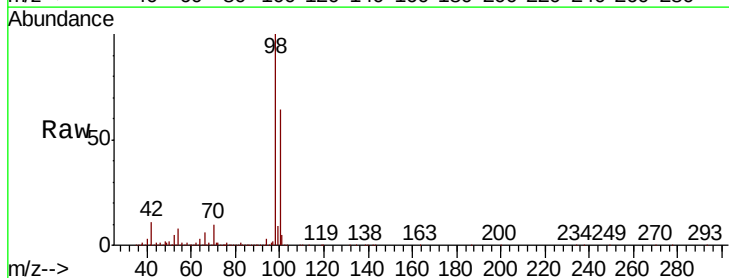
Instrument :  
MSVOA\_X  
ClientSampleId :

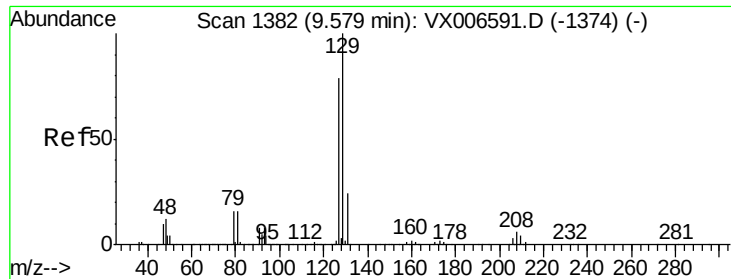
Tot Ion: 88 Resp: 204  
Ion Ratio Lower Upper  
88 100  
43 0.0 22.2 33.4#  
58 103.4 51.0 76.4#



#50  
Toluene-d8  
Concen: 49.048 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

Tgt Ion: 98 Resp: 1232969  
Ion Ratio Lower Upper  
98 100  
100 63.7 52.0 78.0





#60

Dibromochloromethane

Concen: 2.327 ug/l

RT: 9.84 min Scan# 1424

Delta R.T. 0.26 min

Lab File: VX006832.D

Acq: 27 Dec 2018 10:43

Instrument :

MSVOA\_X

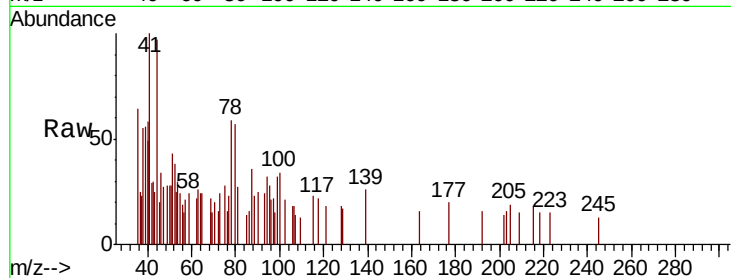
ClientSampled :

Tot Ion:129 Resp: 24

Ion Ratio Lower Upper

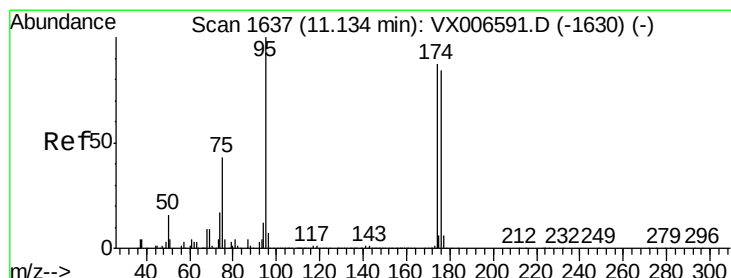
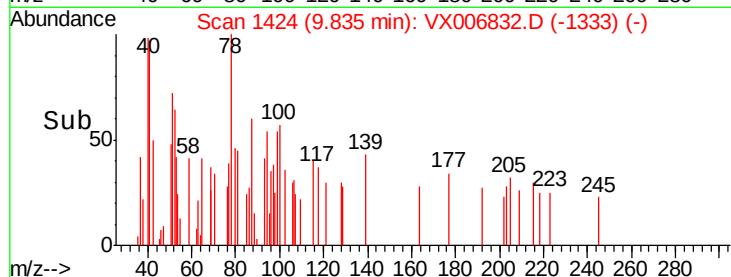
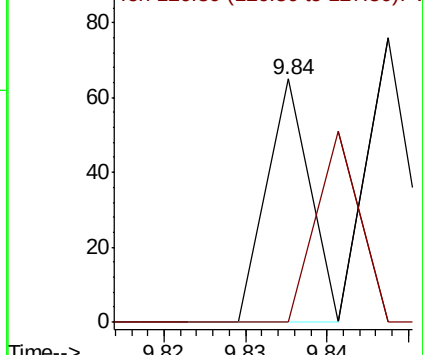
129 100

127 79.2 39.3 117.8



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V



#62

4-Bromofluorobenzene

Concen: 47.687 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX006832.D

Acq: 27 Dec 2018 10:43

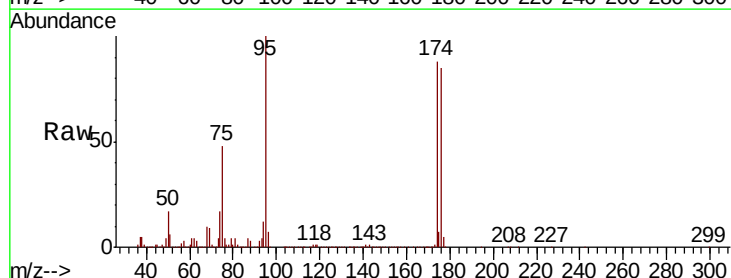
Tgt Ion: 95 Resp: 439036

Ion Ratio Lower Upper

95 100

174 94.2 0.0 182.2

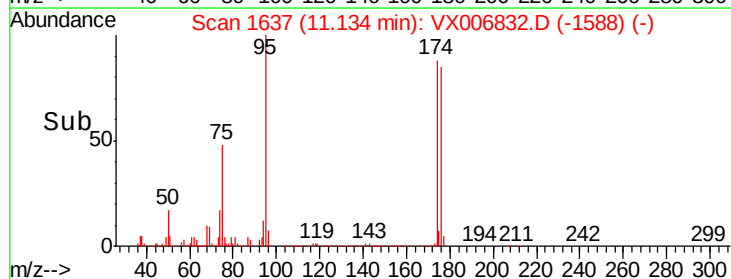
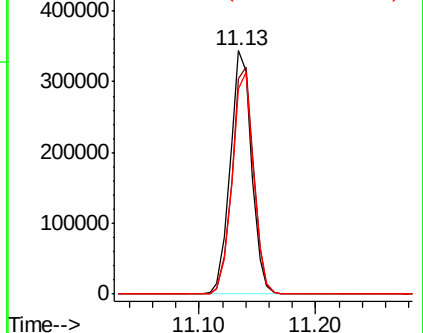
176 91.6 0.0 178.8

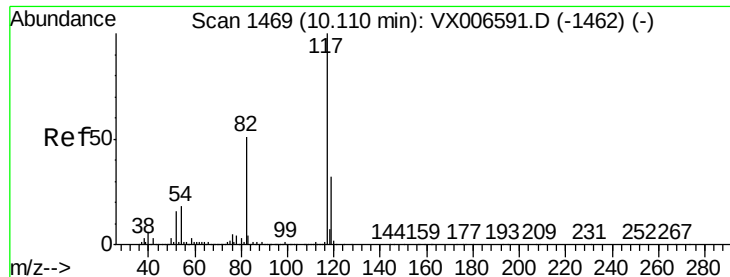


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

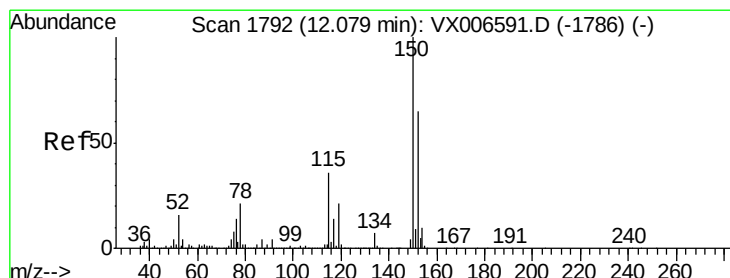
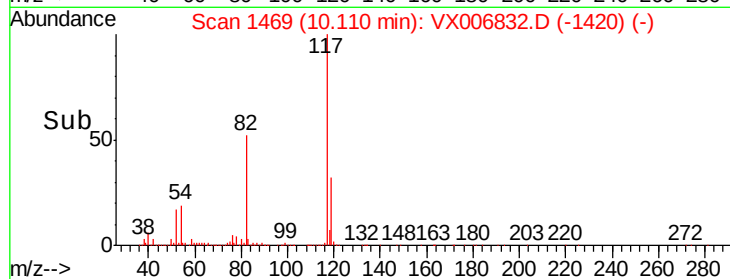
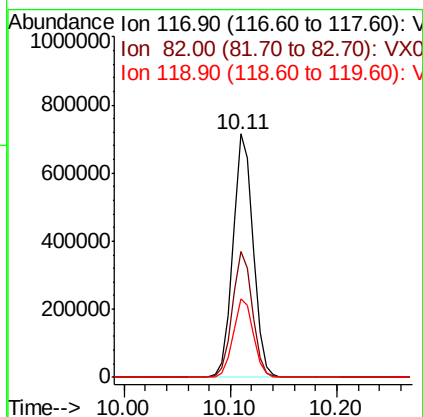
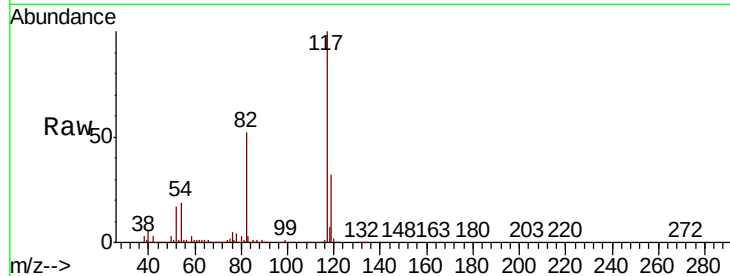




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. -0.00 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

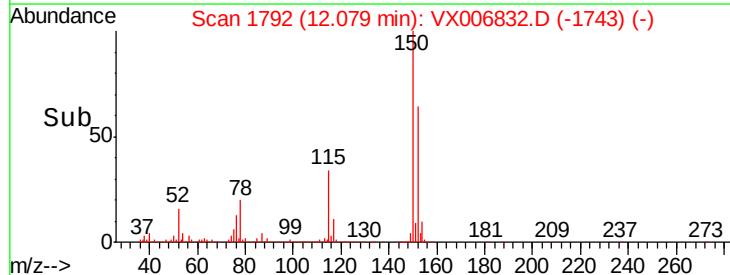
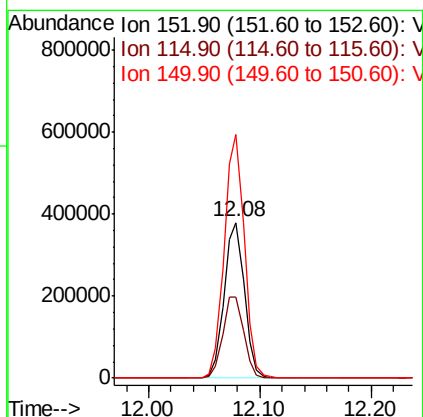
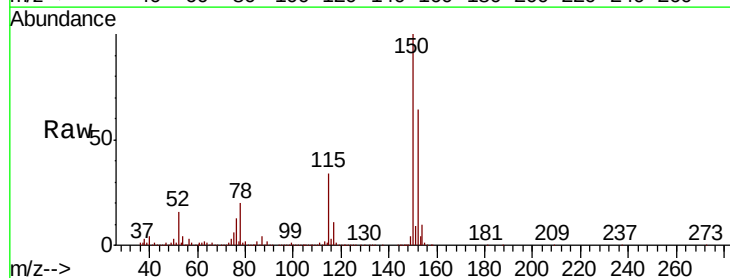
Instrument :  
MSVOA\_X  
ClientSampled :

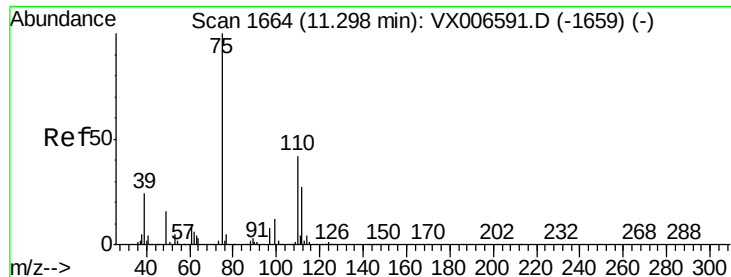
Tot Ion:117 Resp: 951574  
Ion Ratio Lower Upper  
117 100  
82 51.7 41.0 61.6  
119 32.4 25.4 38.0



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX006832.D  
Acq: 27 Dec 2018 10:43

Tgt Ion:152 Resp: 476770  
Ion Ratio Lower Upper  
152 100  
115 54.4 39.1 117.2  
150 155.3 0.0 344.8





#76

1,2,3-Trichloropropane

Concen: 23.287 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX006832.D

Acq: 27 Dec 2018 10:43

Instrument :

MSVOA\_X

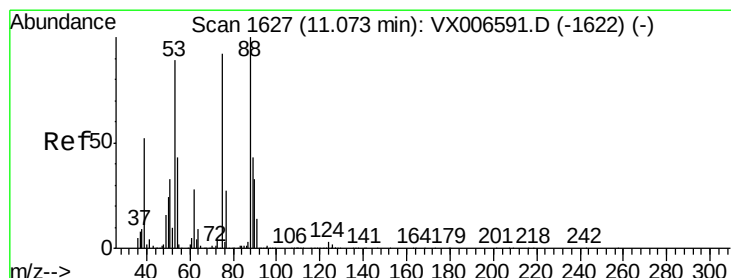
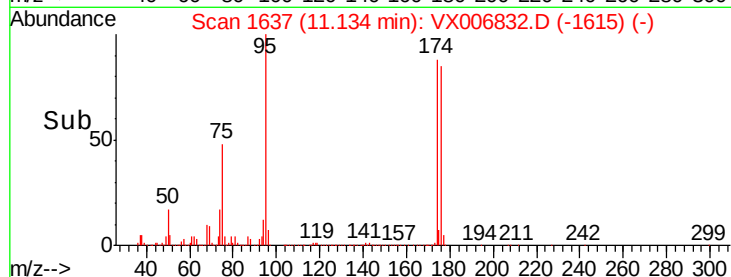
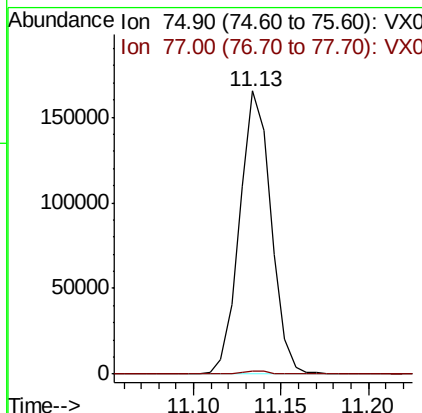
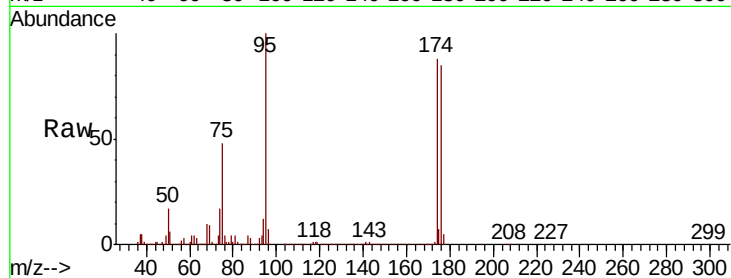
ClientSampleId :

Tot Ion: 75 Resp: 206328

Ion Ratio Lower Upper

75 100

77 1.2 18.5 55.5#



#81

trans-1,4-Dichloro-2-butene

Concen: 69.101 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX006832.D

Acq: 27 Dec 2018 10:43

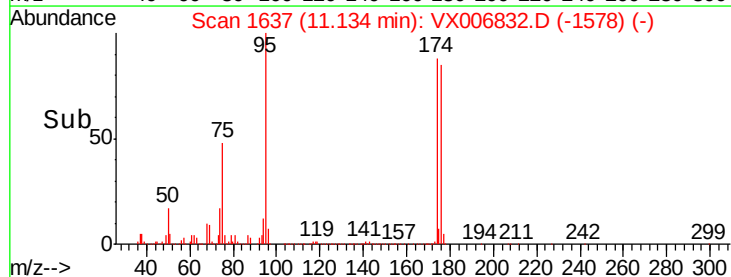
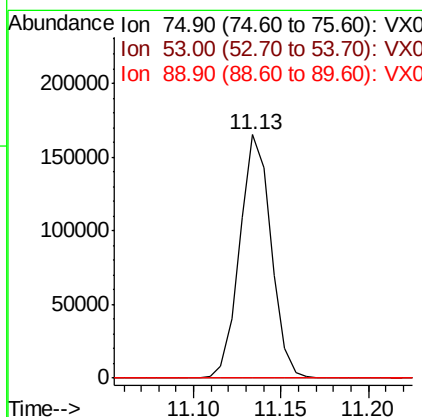
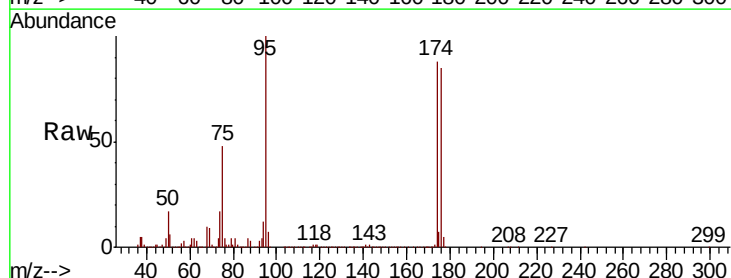
Tgt Ion: 75 Resp: 206328

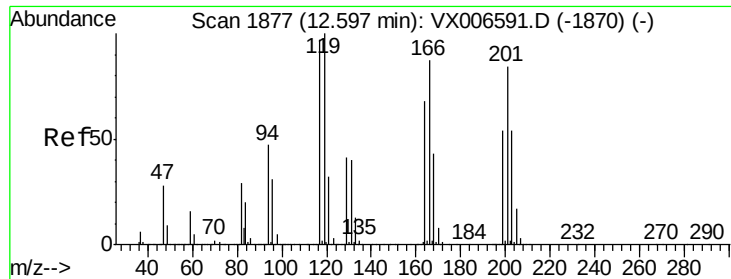
Ion Ratio Lower Upper

75 100

53 0.1 79.7 119.5#

89 0.1 38.0 57.0#





#90

Hexachloroethane

Concen: 3.304 ug/l

RT: 12.67 min Scan# 1889

Delta R.T. 0.07 min

Lab File: VX006832.D

Acq: 27 Dec 2018 10:43

Instrument :

MSVOA\_X

ClientSampleId :

Tot Ion:117 Resp: 51

Ion Ratio Lower Upper

117 100

201 98.0 42.9 128.7

