

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX092818\  
 Data File : VX004833.D  
 Acq On : 28 Sep 2018 20:32  
 Operator : JC/MD  
 Sample : J5148-01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 WS-1

Quant Time: Sep 29 06:32:07 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X092618W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 26 14:17:02 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 232760   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 377726   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 368074   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 202486   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.07  | 65   | 180867   | 54.40 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.80% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 149918   | 46.83 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.66%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 546407   | 51.34 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.68% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 195994   | 51.12 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.24% |          |

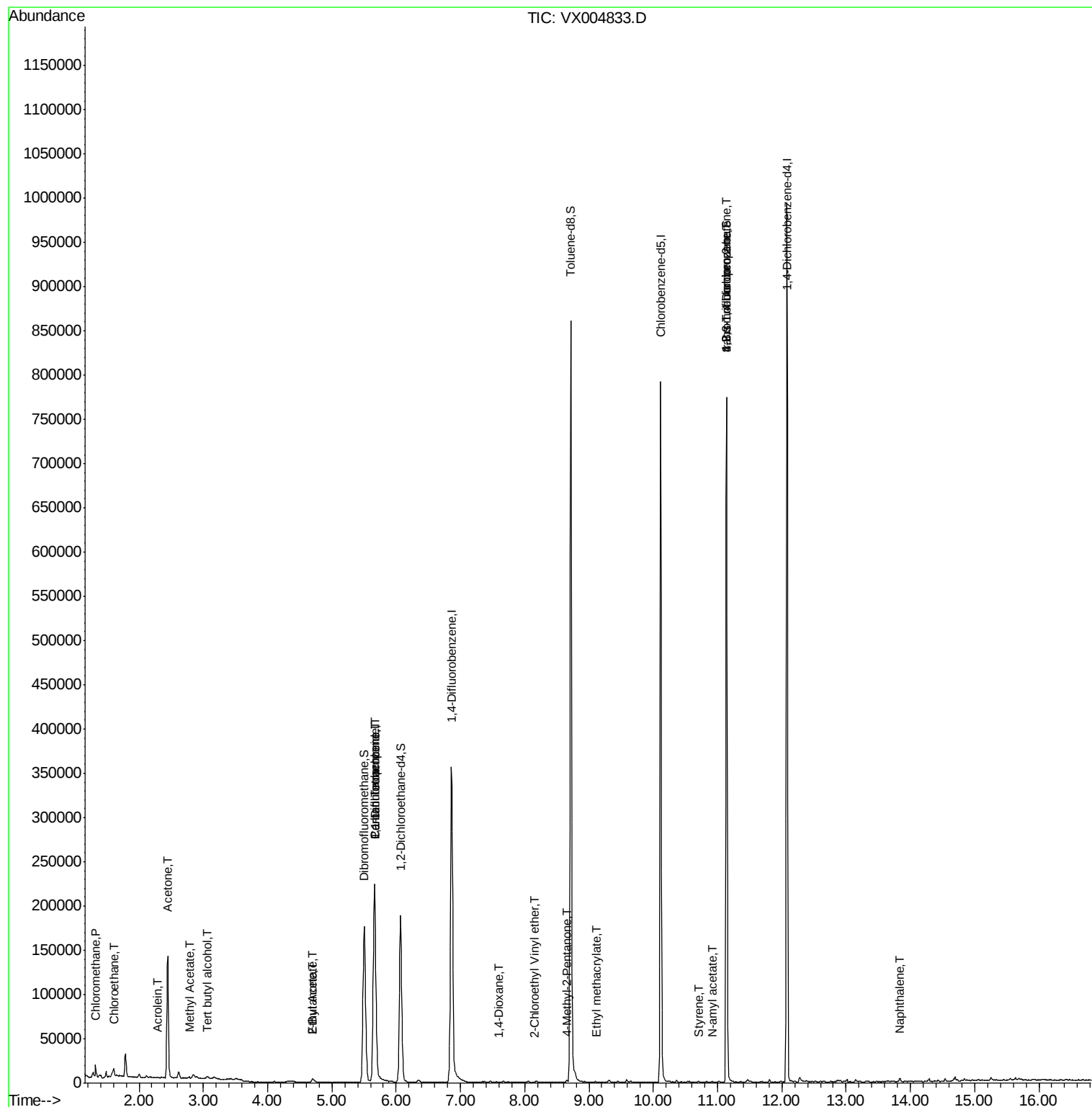
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 8922     | 2.317     | ug/l   | 99     |
| 6) Chloroethane                | 1.61  | 64   | 5139     | 0.298     | ug/l # | 61     |
| 11) Tert butyl alcohol         | 3.07  | 59   | 3435     | 3.695     | ug/l # | 81     |
| 13) Acrolein                   | 2.29  | 56   | 410      | 0.620     | ug/l # | 71     |
| 16) Acetone                    | 2.45  | 43   | 146330   | 75.382    | ug/l   | 96     |
| 18) Methyl Acetate             | 2.78  | 43   | 1666     | 0.339     | ug/l   | 94     |
| 20) Methylene Chloride         | 2.85  | 84   | 331      | Below Cal | #      | 82     |
| 25) 2-Butanone                 | 4.71  | 43   | 7556     | 2.641     | ug/l   | 90     |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 16136    | 3.694     | ug/l # | 50     |
| 37) Ethyl Acetate              | 4.71  | 43   | 7556     | 1.303     | ug/l # | 68     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 21230    | 4.624     | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.60  | 88   | 19       | 0.201     | ug/l # | 47     |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1744     | 0.331     | ug/l # | 77     |
| 56) Ethyl methacrylate         | 9.12  | 69   | 139      | 2.887     | ug/l # | 6      |
| 58) 2-Chloroethyl Vinyl ether  | 8.14  | 63   | 52       | 14.259    | ug/l # | 45     |
| 70) Styrene                    | 10.72 | 104  | 151      | 2.155     | ug/l # | 72     |
| 74) N-amyl acetate             | 10.91 | 43   | 265      | 1.784     | ug/l # | 16     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 97542    | 21.492    | ug/l # | 37     |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 315      | Below Cal |        | 76     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 97542    | 58.275    | ug/l # | 10     |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 1036     | Below Cal |        | 75     |
| 95) Naphthalene                | 13.83 | 128  | 2643     | 0.874     | ug/l # | 94     |

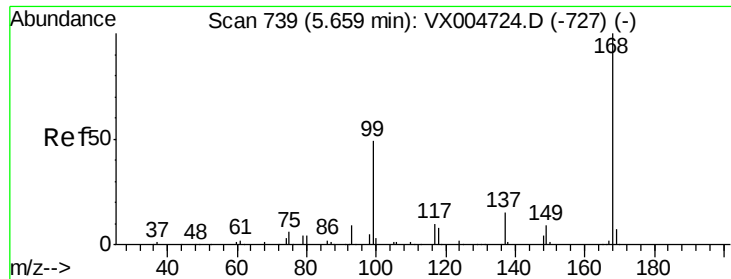
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Wed Sep 26 14:17:02 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: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampled :

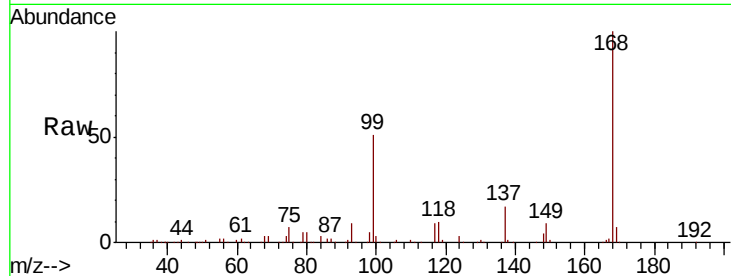
WS-1

Tot Ion:168 Resp: 232760

Ion Ratio Lower Upper

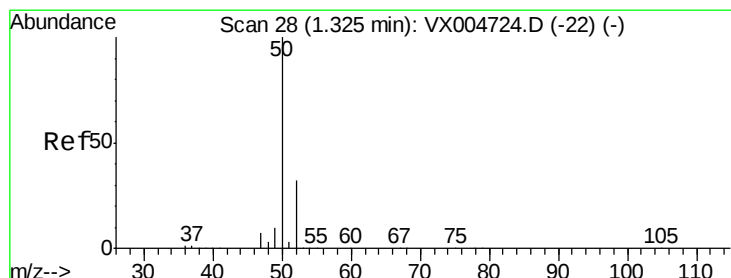
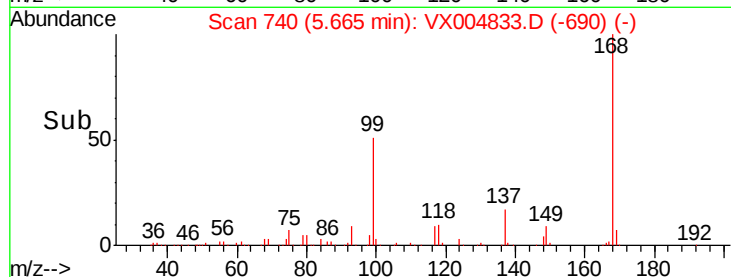
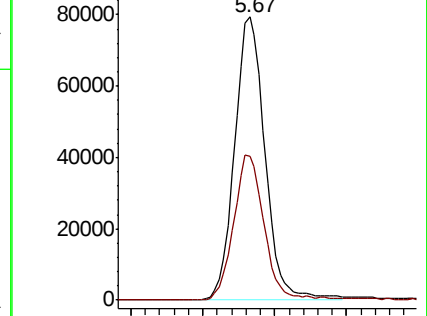
168 100

99 51.0 39.9 59.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: 2.317 ug/l

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX004833.D

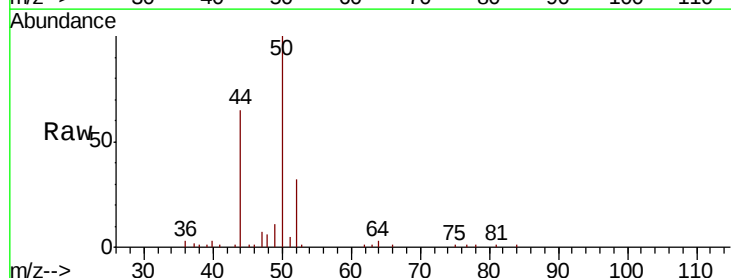
Acq: 28 Sep 2018 20:32

Tgt Ion: 50 Resp: 8922

Ion Ratio Lower Upper

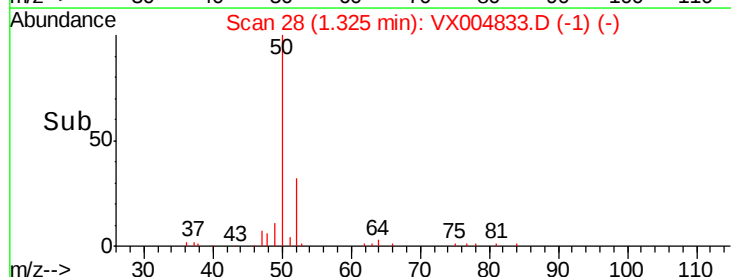
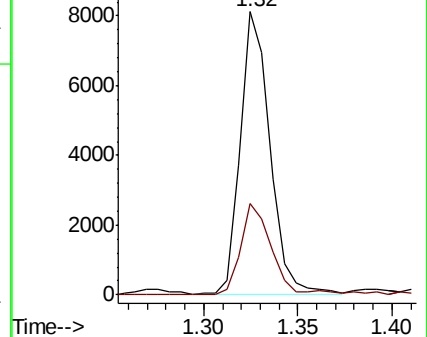
50 100

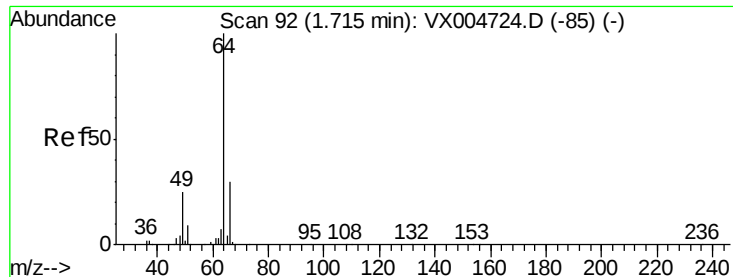
52 32.3 26.2 39.2



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#6

Chloroethane

Concen: 0.298 ug/l

RT: 1.61 min Scan# 75

Delta R.T. -0.10 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampled :

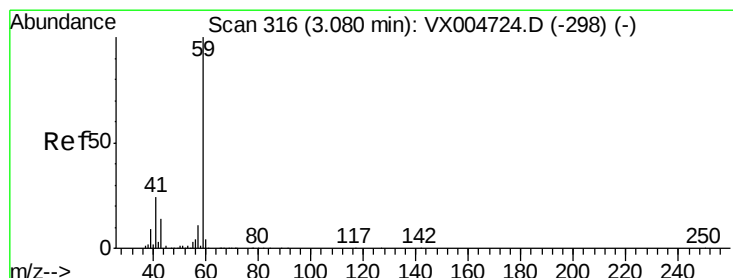
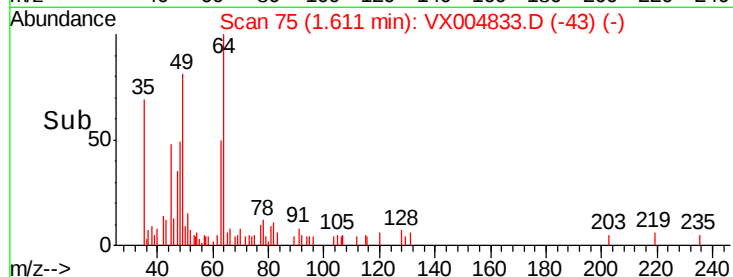
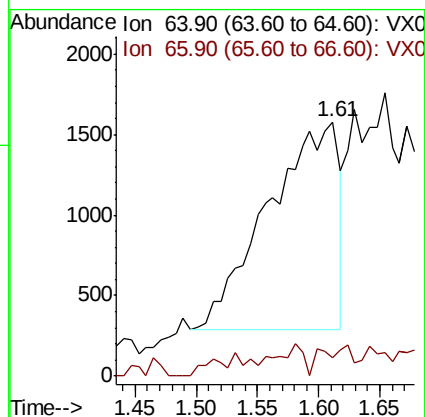
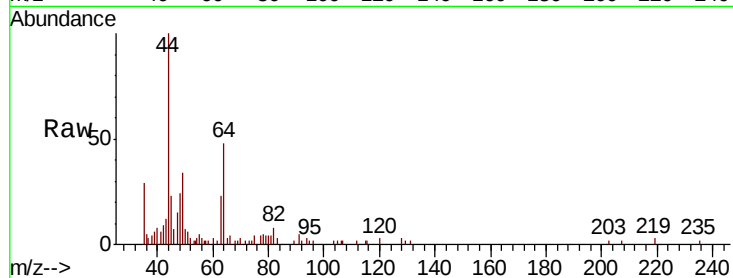
WS-1

Tot Ion: 64 Resp: 5139

Ion Ratio Lower Upper

64 100

66 9.1 24.6 36.8#



#11

Tert butyl alcohol

Concen: 3.695 ug/l

RT: 3.07 min Scan# 314

Delta R.T. -0.01 min

Lab File: VX004833.D

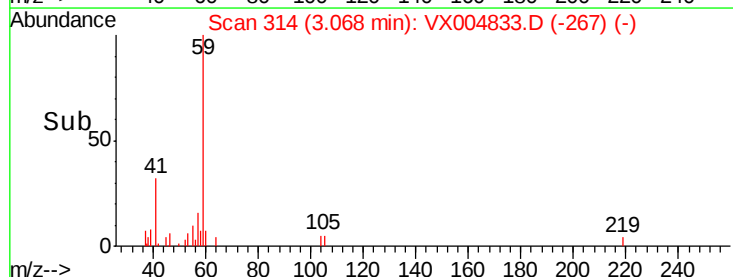
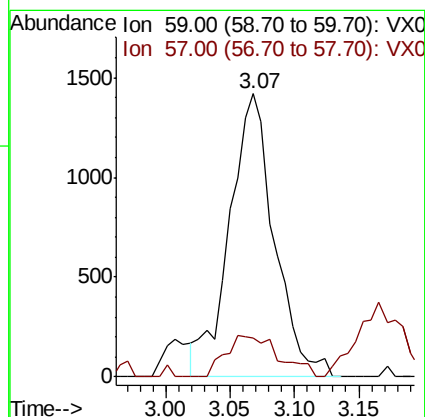
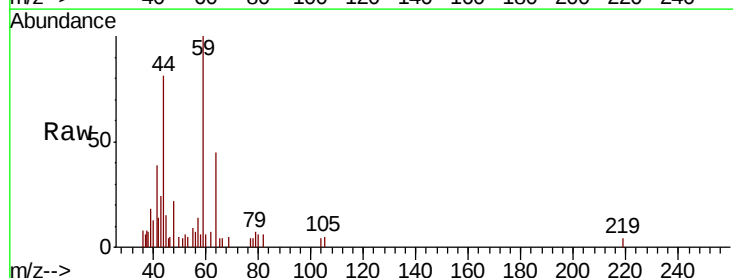
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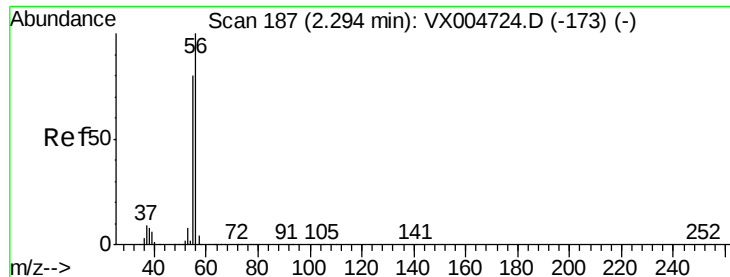
Tgt Ion: 59 Resp: 3435

Ion Ratio Lower Upper

59 100

57 17.3 8.2 12.4#





#13

Acrolein

Concen: 0.620 ug/l

RT: 2.29 min Scan# 187

Delta R.T. 0.00 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampled :

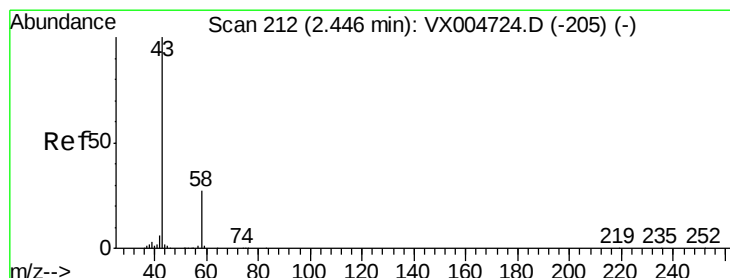
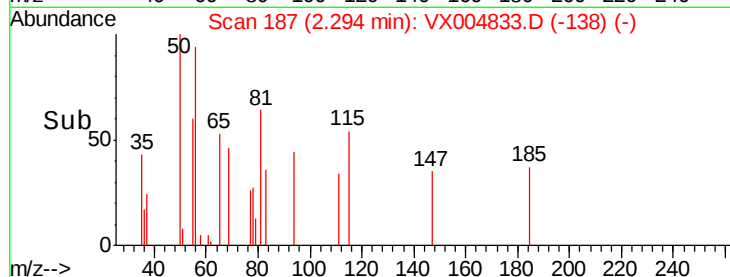
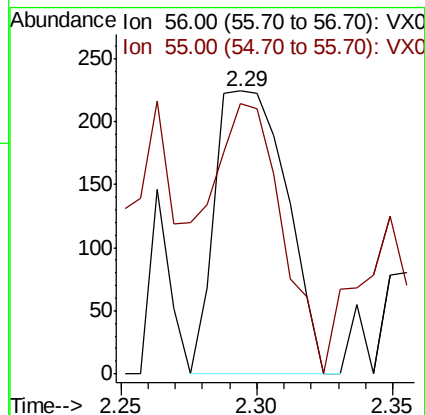
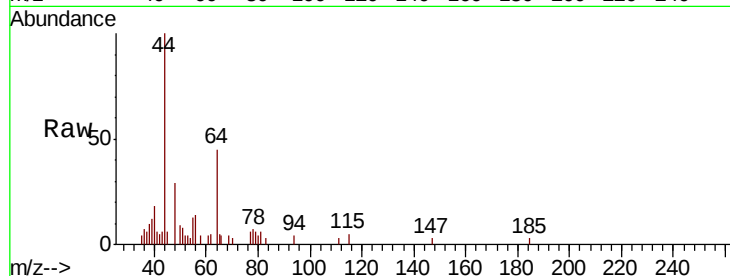
WS-1

Tot Ion: 56 Resp: 410

Ion Ratio Lower Upper

56 100

55 91.7 54.7 82.1#



#16

Acetone

Concen: 75.382 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX004833.D

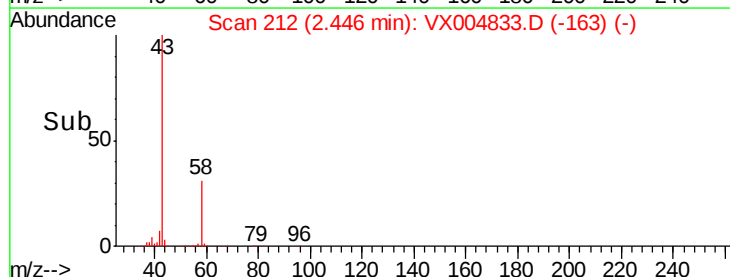
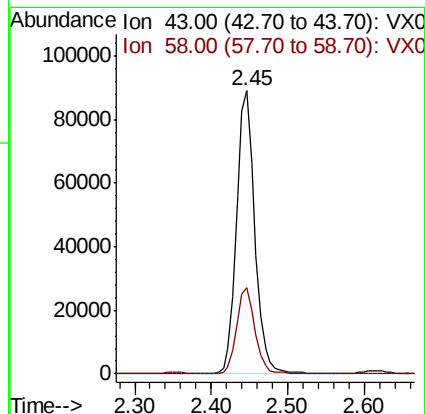
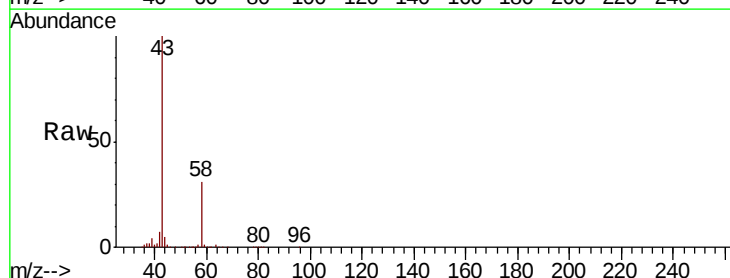
Acq: 28 Sep 2018 20:32

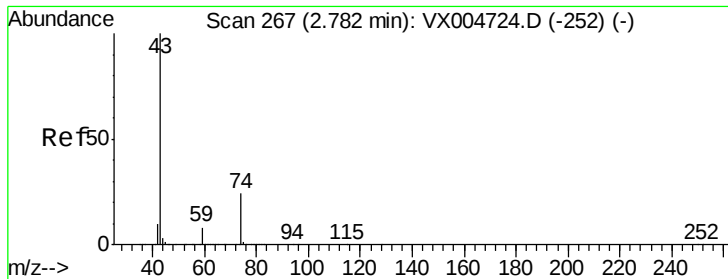
Tgt Ion: 43 Resp: 146330

Ion Ratio Lower Upper

43 100

58 30.6 26.2 39.4

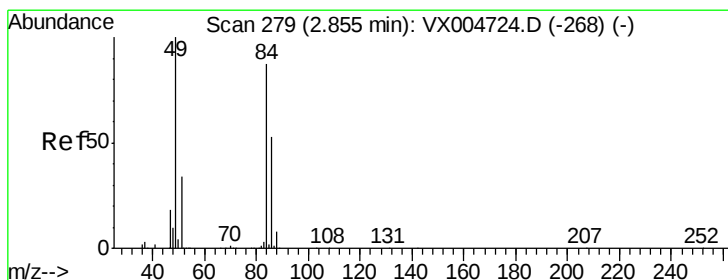
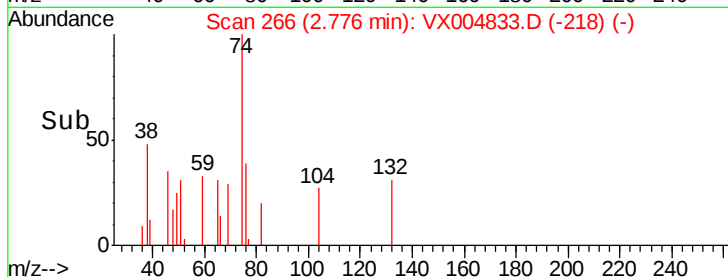
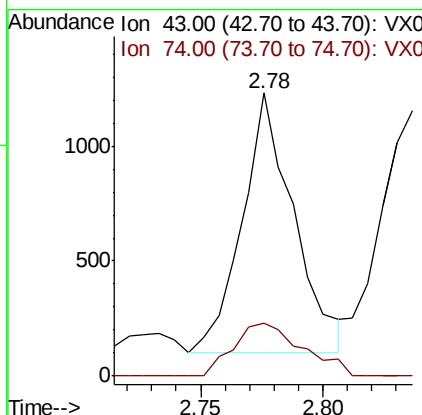
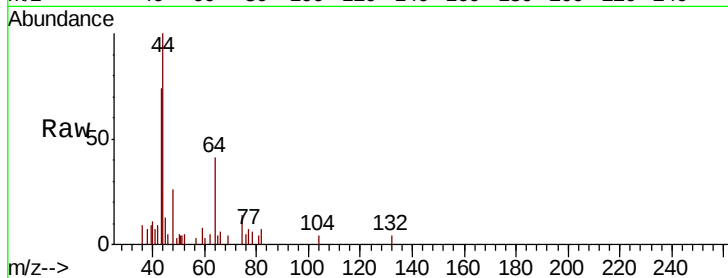




#18  
Methyl Acetate  
Concen: 0.339 ug/l  
RT: 2.78 min Scan# 266  
Delta R.T. -0.01 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

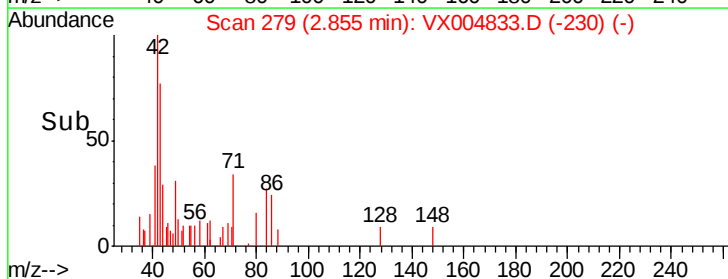
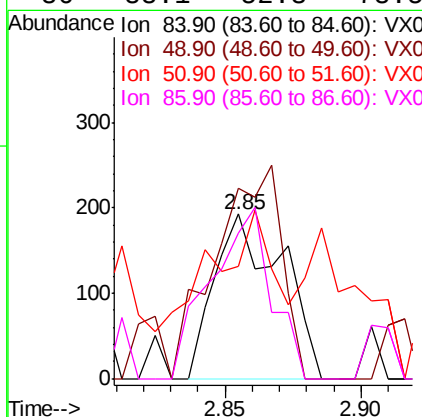
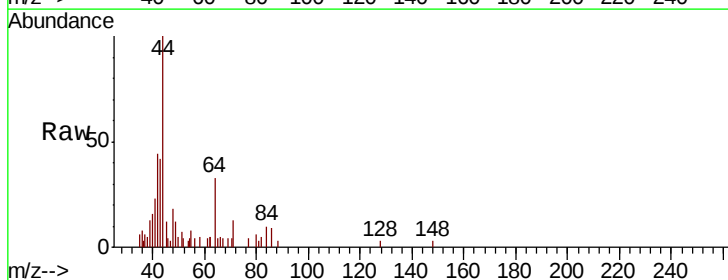
Instrument :  
MSVOA\_X  
ClientSampled :  
WS-1

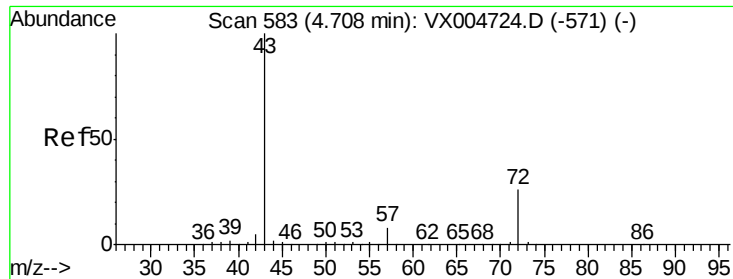
Tot Ion: 43 Resp: 1666  
Ion Ratio Lower Upper  
43 100  
74 27.4 19.4 29.2



#20  
Methylene Chloride  
Concen: Below Cal  
RT: 2.85 min Scan# 279  
Delta R.T. 0.00 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

Tgt Ion: 84 Resp: 331  
Ion Ratio Lower Upper  
84 100  
49 115.5 101.2 151.8  
51 20.7 29.5 44.3#  
86 88.1 52.3 78.5#

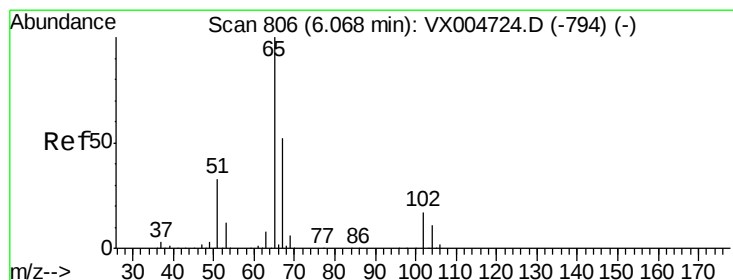
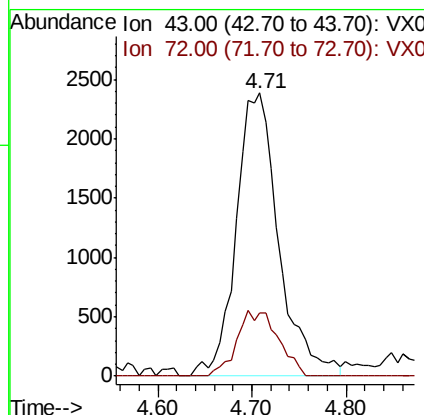
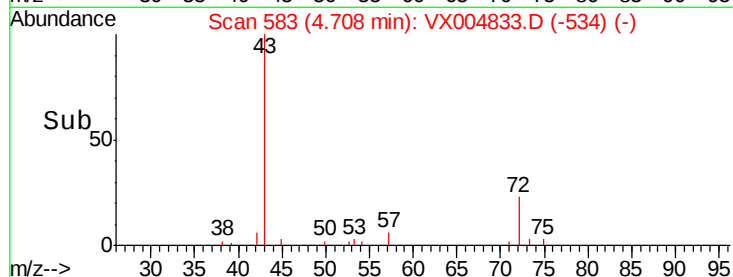
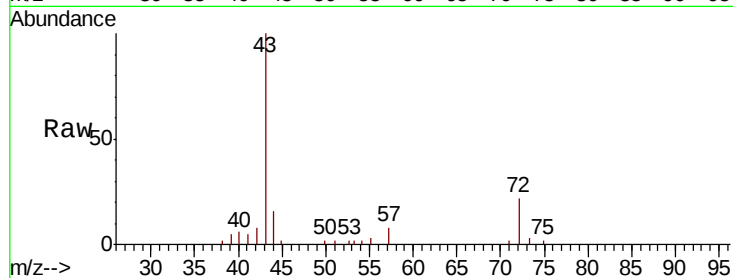




#25  
2-Butanone  
Concen: 2.641 ug/l  
RT: 4.71 min Scan# 583  
Delta R.T. 0.00 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

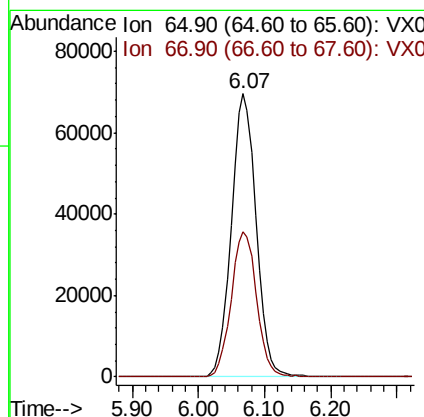
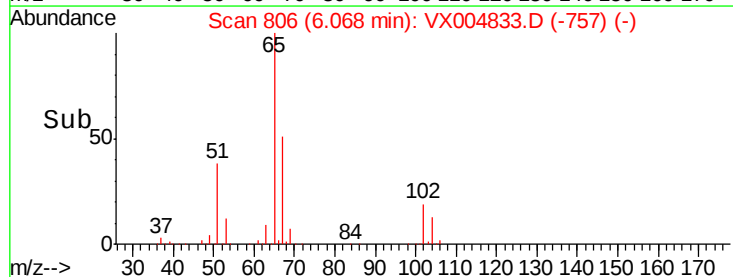
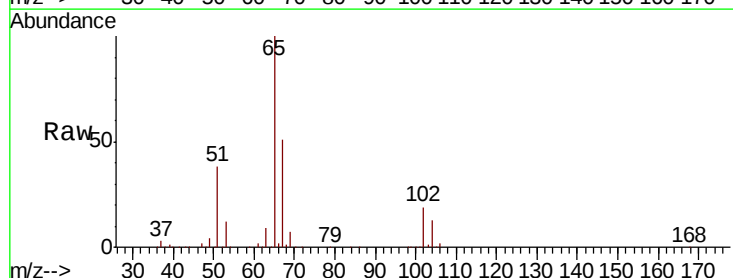
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MSVOA\_X  
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WS-1

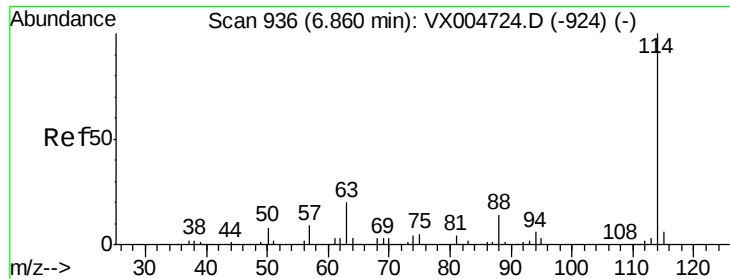
Tot Ion: 43 Resp: 7556  
Ion Ratio Lower Upper  
43 100  
72 22.1 22.0 33.0



#33  
1,2-Dichloroethane-d4  
Concen: 54.396 ug/l  
RT: 6.07 min Scan# 806  
Delta R.T. 0.00 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

Tgt Ion: 65 Resp: 180867  
Ion Ratio Lower Upper  
65 100  
67 52.3 0.0 106.8

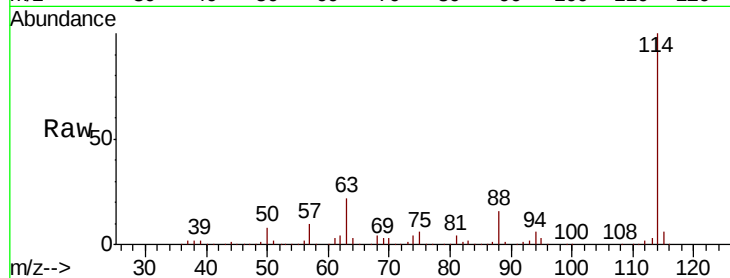




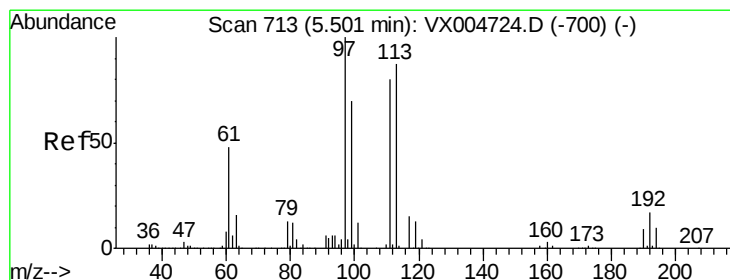
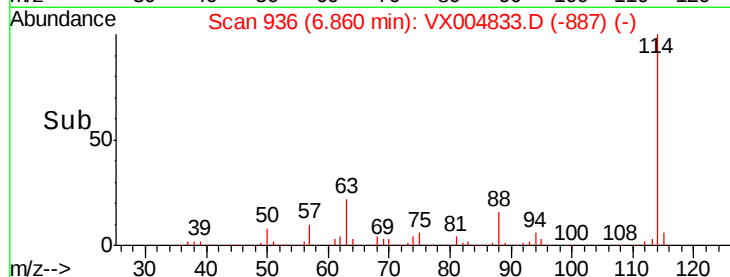
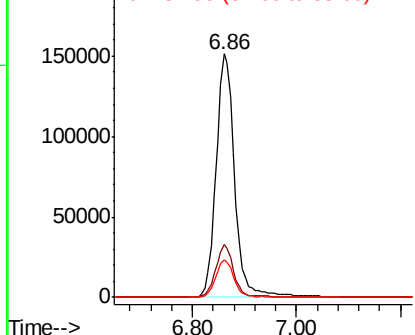
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX004833.D  
 Acq: 28 Sep 2018 20:32

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 WS-1

Tot Ion:114 Resp: 377726  
 Ion Ratio Lower Upper  
 114 100  
 63 21.7 0.0 39.0  
 88 15.6 0.0 30.4

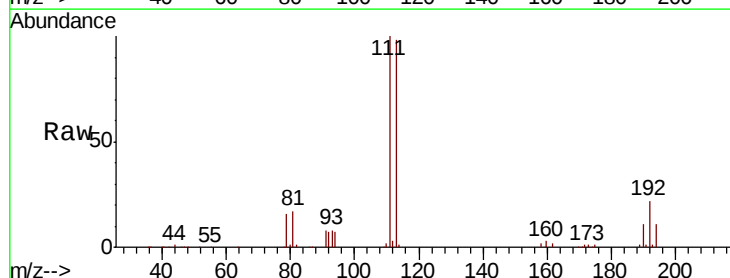


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

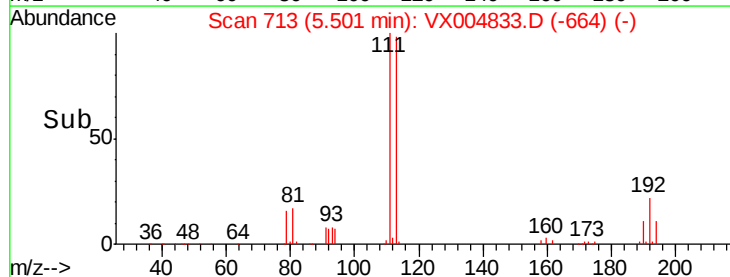
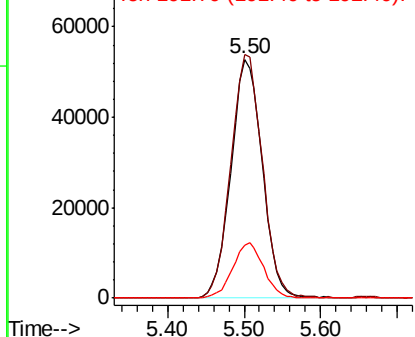


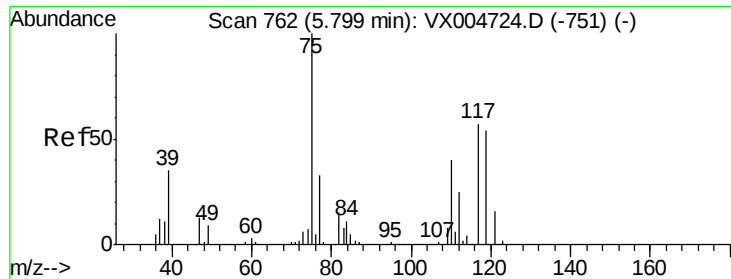
#35  
 Dibromofluoromethane  
 Concen: 46.831 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.00 min  
 Lab File: VX004833.D  
 Acq: 28 Sep 2018 20:32

Tgt Ion:113 Resp: 149918  
 Ion Ratio Lower Upper  
 113 100  
 111 102.4 82.4 123.6  
 192 22.7 19.4 29.2



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: 3.694 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampleId :

WS-1

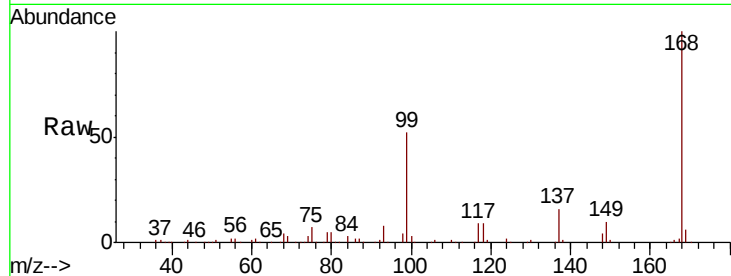
Tot Ion: 75 Resp: 16136

Ion Ratio Lower Upper

75 100

110 9.8 18.0 54.0#

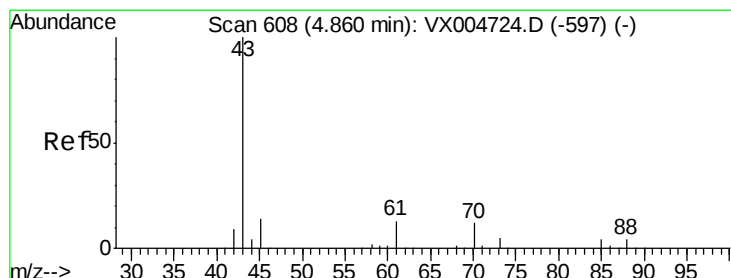
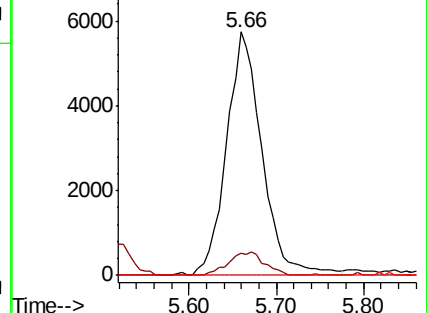
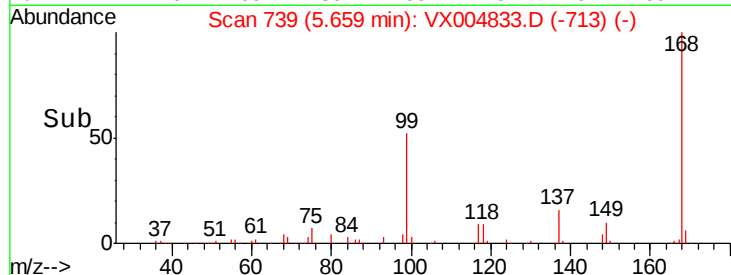
77 0.0 24.6 36.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): VX0

Ion 76.90 (76.60 to 77.60): VX0



#37

Ethyl Acetate

Concen: 1.303 ug/l

RT: 4.71 min Scan# 583

Delta R.T. -0.15 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

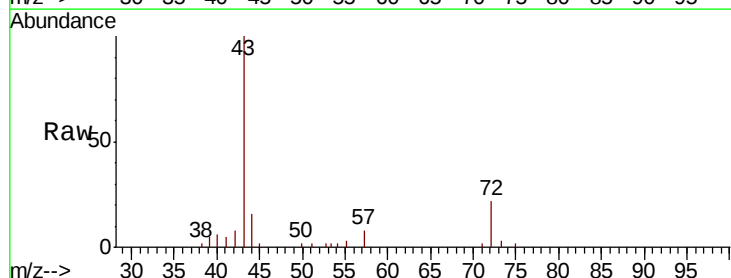
Tgt Ion: 43 Resp: 7556

Ion Ratio Lower Upper

43 100

61 0.0 11.5 17.3#

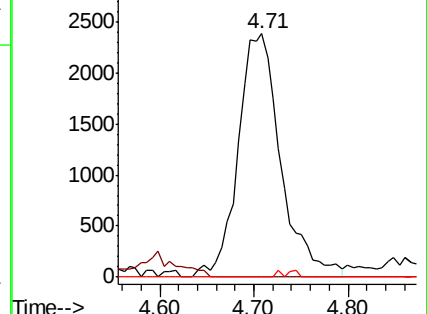
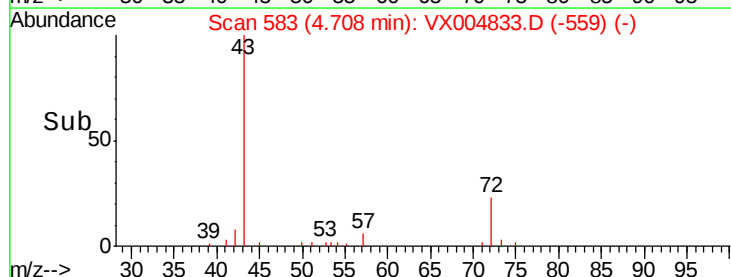
70 0.3 9.0 13.6#

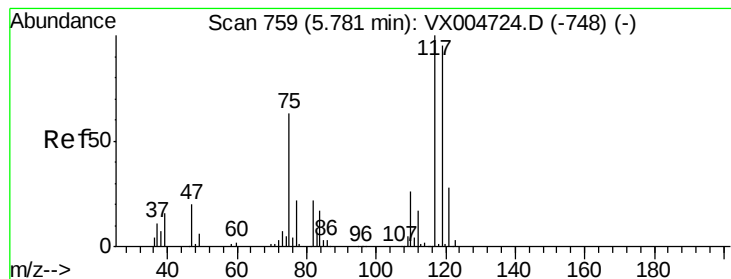


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 70.00 (69.70 to 70.70): VX0





#38

Carbon Tetrachloride

Concen: 4.624 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampled :

WS-1

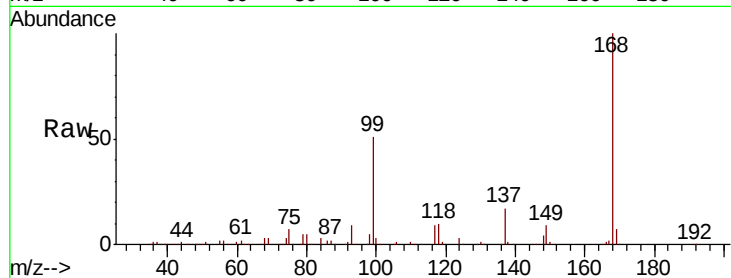
Tot Ion:117 Resp: 21230

Ion Ratio Lower Upper

117 100

119 6.1 78.8 118.2#

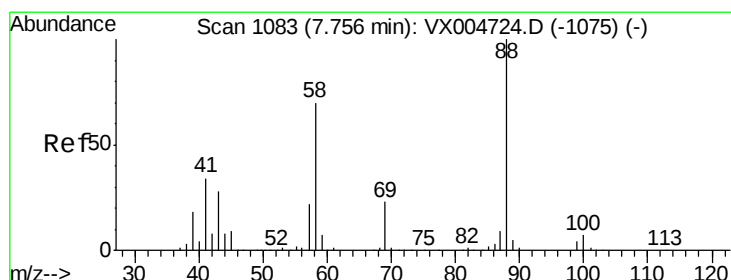
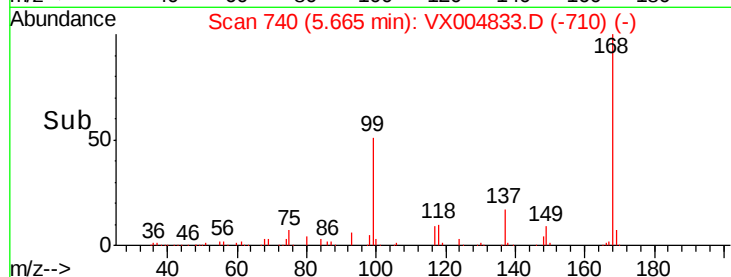
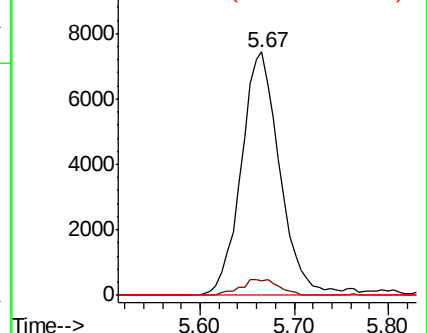
121 0.0 24.9 37.3#



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: 0.201 ug/l

RT: 7.60 min Scan# 1058

Delta R.T. -0.15 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

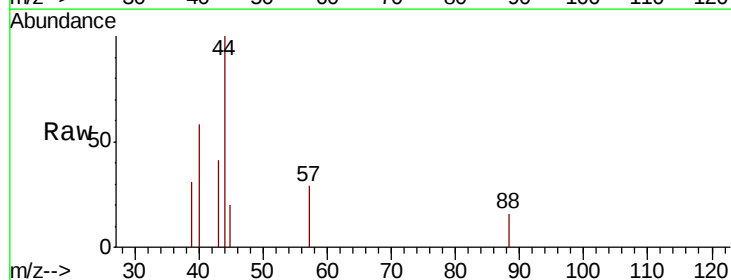
Tgt Ion: 88 Resp: 19

Ion Ratio Lower Upper

88 100

43 0.0 24.7 37.1#

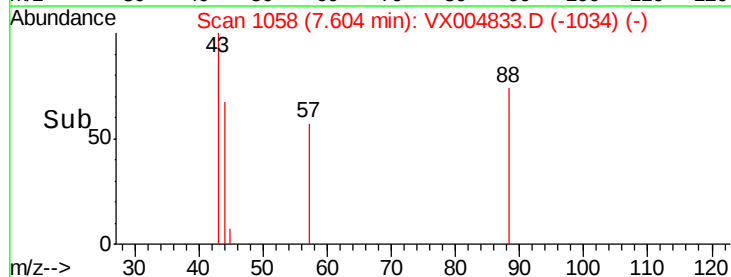
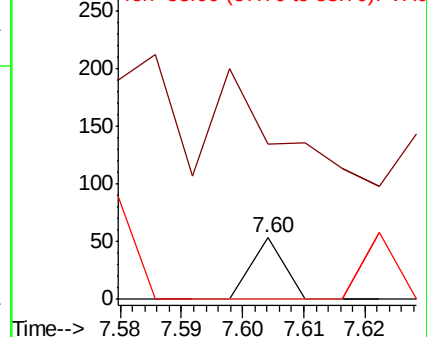
58 110.5 55.3 82.9#

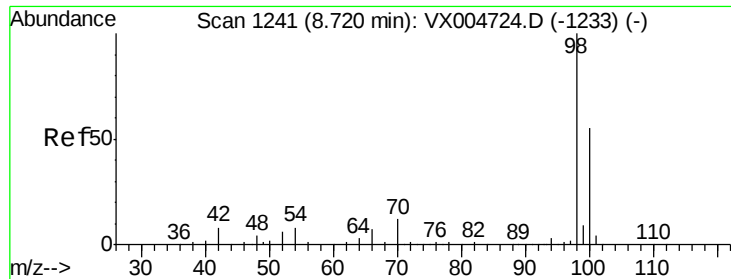


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

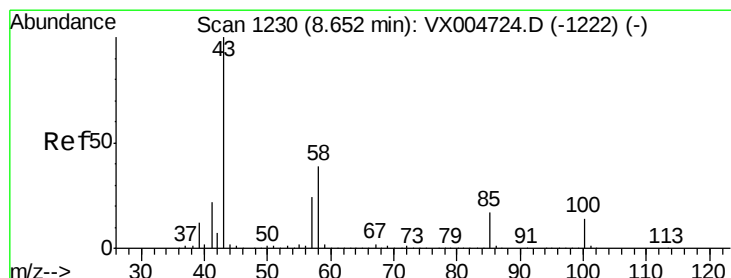
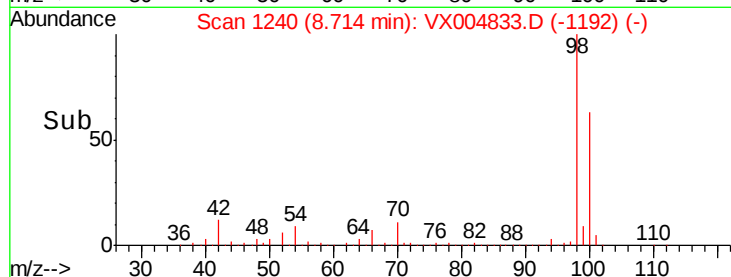
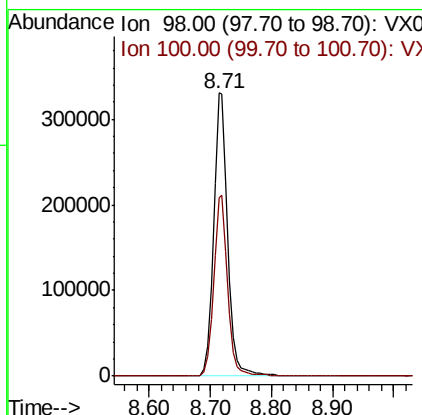
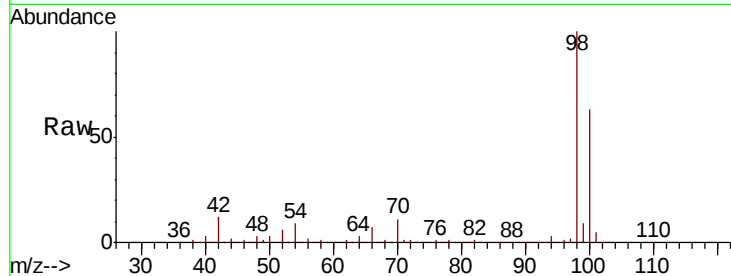




#50  
Toluene-d8  
Concen: 51.341 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. -0.01 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

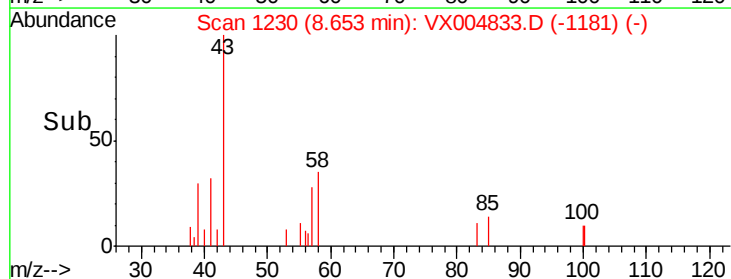
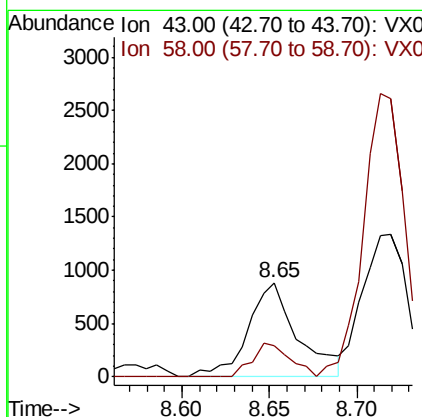
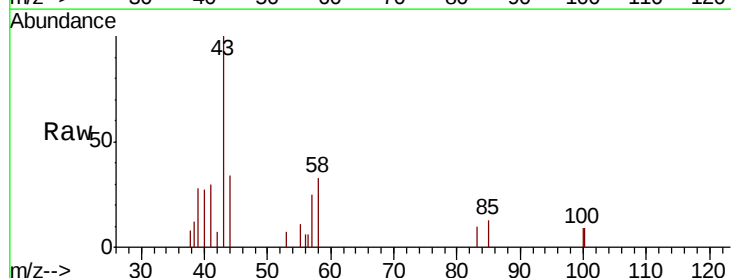
Instrument :  
MSVOA\_X  
ClientSampled :  
WS-1

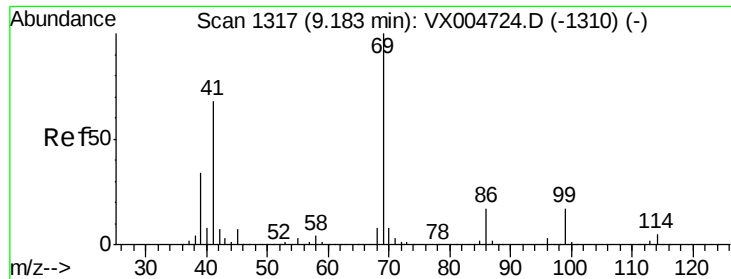
Tot Ion: 98 Resp: 546407  
Ion Ratio Lower Upper  
98 100  
100 63.4 52.9 79.3



#51  
4-Methyl-2-Pentanone  
Concen: 0.331 ug/l  
RT: 8.65 min Scan# 1230  
Delta R.T. 0.00 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

Tgt Ion: 43 Resp: 1744  
Ion Ratio Lower Upper  
43 100  
58 26.9 33.1 49.7#





#56

Ethyl methacrylate

Concen: 2.887 ug/l

RT: 9.12 min Scan# 1306

Delta R.T. -0.07 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampled :

WS-1

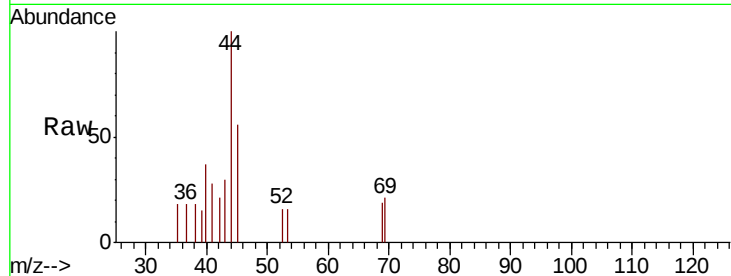
Tot Ion: 69 Resp: 139

Ion Ratio Lower Upper

69 100

41 111.5 51.0 76.4#

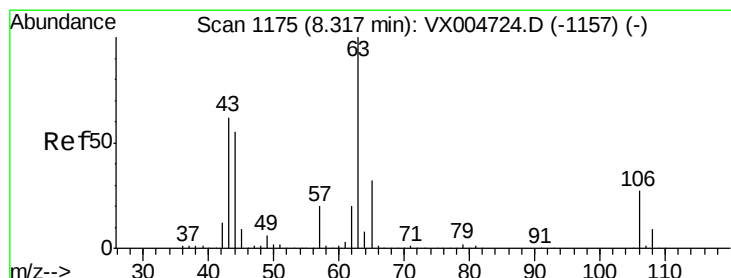
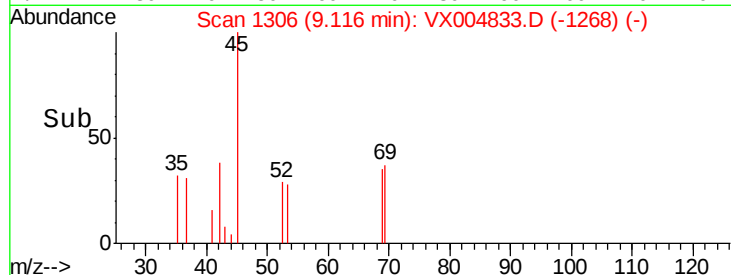
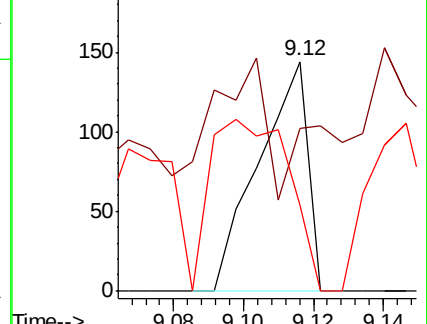
39 120.9 26.1 39.1#



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: 14.259 ug/l

RT: 8.14 min Scan# 1146

Delta R.T. -0.18 min

Lab File: VX004833.D

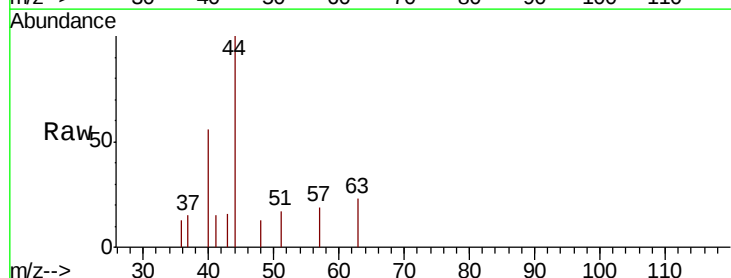
Acq: 28 Sep 2018 20:32

Tgt Ion: 63 Resp: 52

Ion Ratio Lower Upper

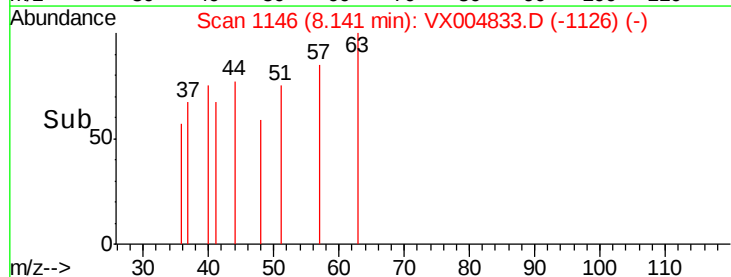
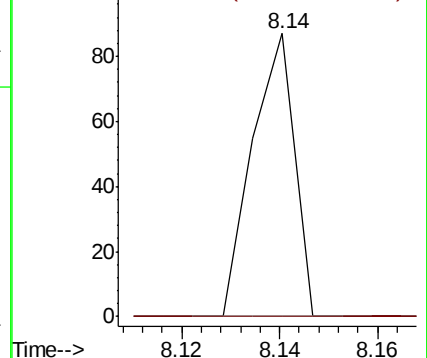
63 100

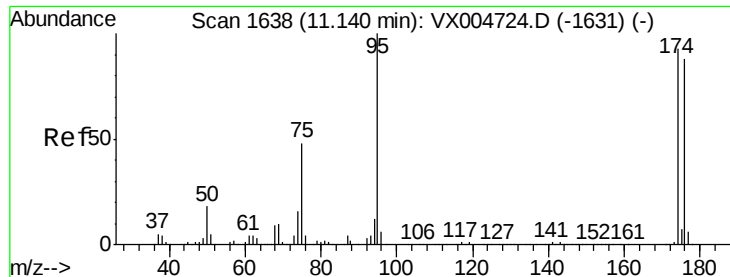
106 0.0 23.9 35.9#



Abundance Ion 62.90 (62.60 to 63.60): VX0

Ion 105.90 (105.60 to 106.60): V

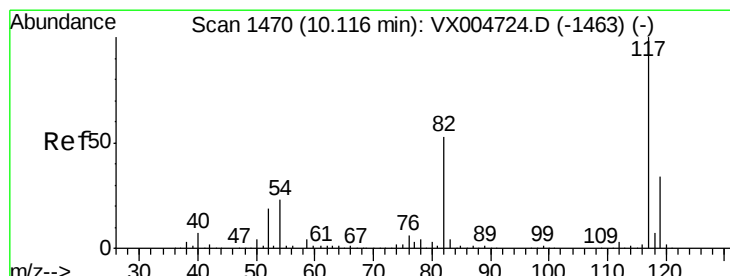
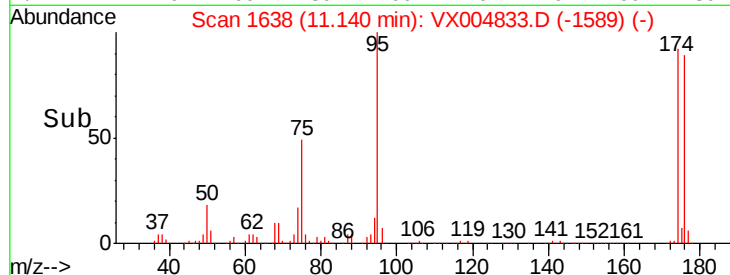
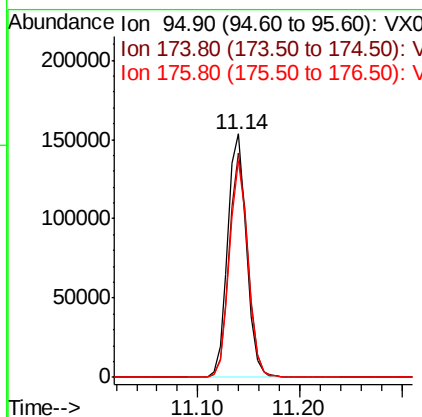
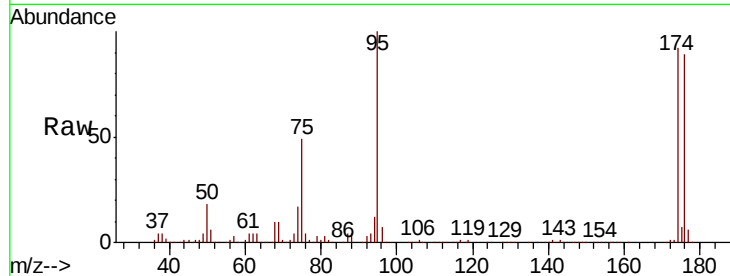




#62  
4-Bromofluorobenzene  
Concen: 51.119 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. 0.00 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

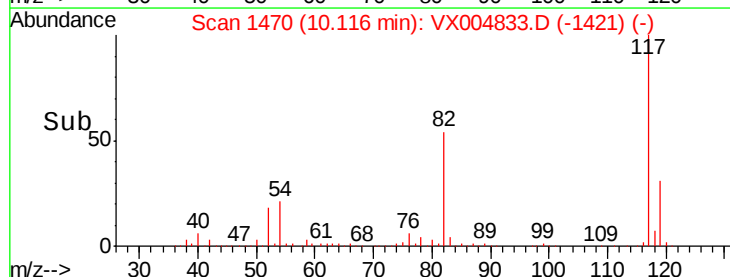
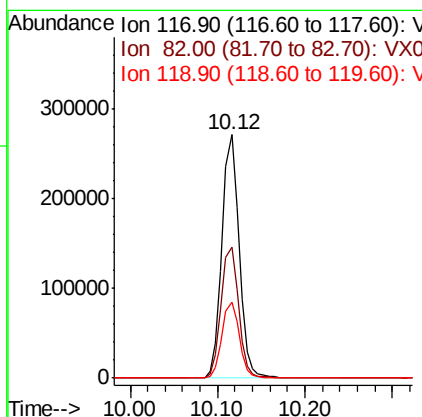
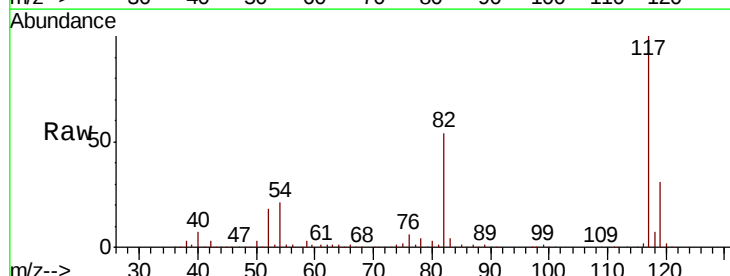
Instrument :  
MSVOA\_X  
ClientSampleId :  
WS-1

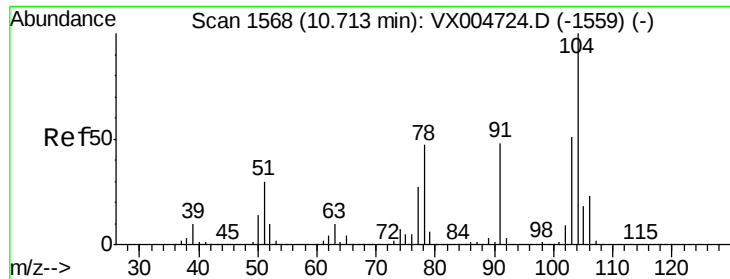
| Tot Ion   | 95    | Resp  | 195994 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 90.9  | 0.0   | 185.2  |
| 176       | 87.2  | 0.0   | 178.6  |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.00 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

| Tgt Ion   | 117   | Resp  | 368074 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 54.0  | 47.8  | 71.6   |
| 119       | 31.5  | 29.3  | 43.9   |





#70

Stvrene

Concen: 2.155 ug/l

RT: 10.72 min Scan# 1569

Delta R.T. 0.01 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampled :

WS-1

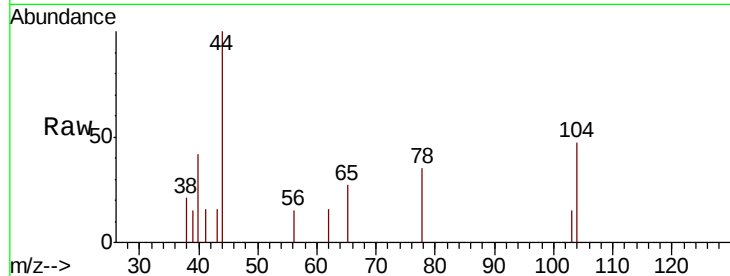
Tot Ion:104 Resp: 151

Ion Ratio Lower Upper

104 100

78 74.2 37.4 56.0#

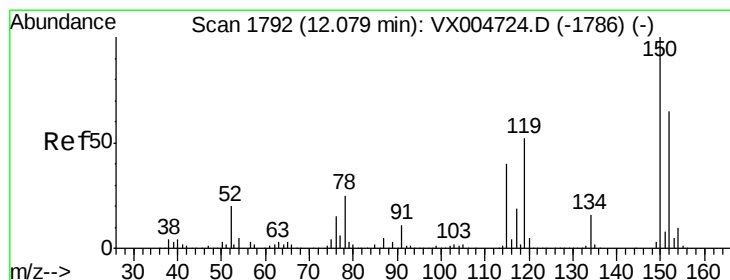
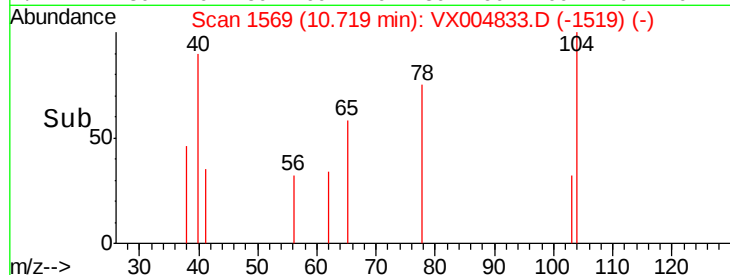
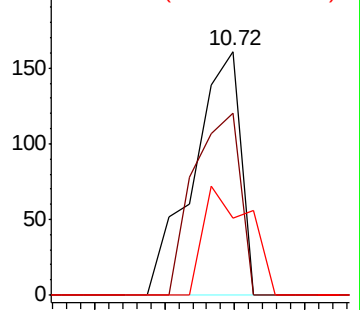
103 43.0 43.8 65.6#



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: VX004833.D

Acq: 28 Sep 2018 20:32

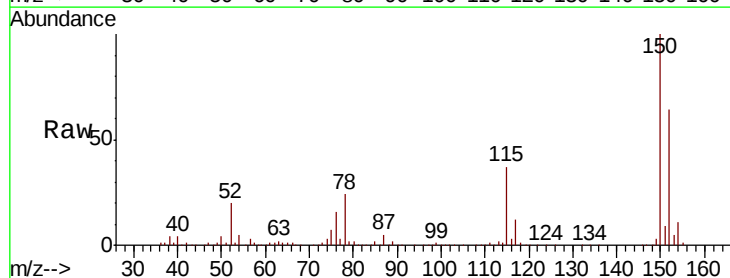
Tgt Ion:152 Resp: 202486

Ion Ratio Lower Upper

152 100

115 56.6 39.0 117.0

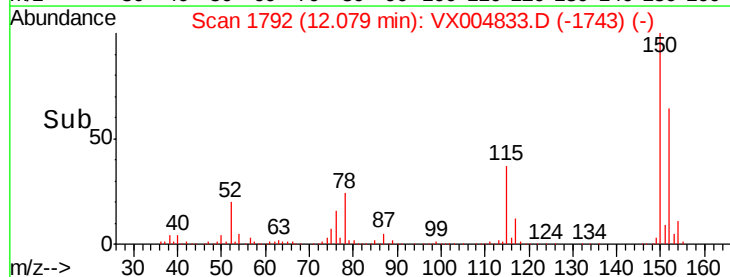
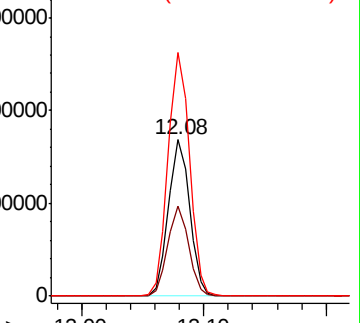
150 157.3 0.0 351.0

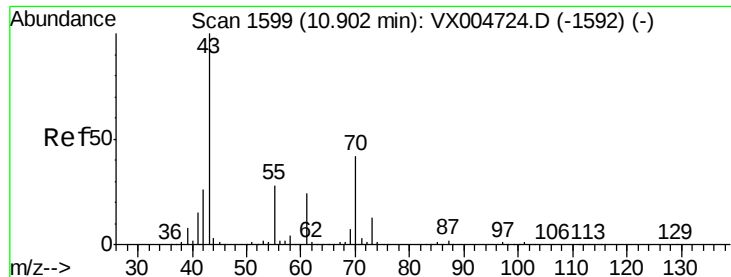


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 1.784 ug/l

RT: 10.91 min Scan# 1601

Delta R.T. 0.01 min

Lab File: VX004833.D

Acq: 28 Sep 2018 20:32

Instrument :

MSVOA\_X

ClientSampleId :

WS-1

Tot Ion: 43 Resp: 265

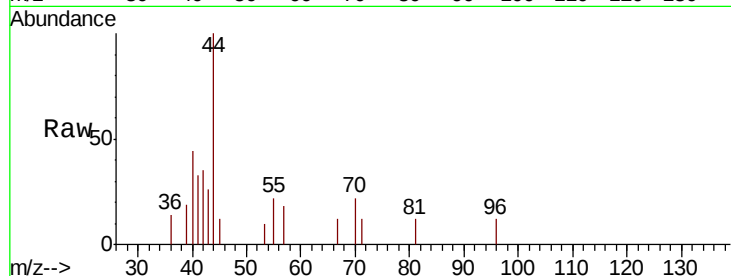
Ion Ratio Lower Upper

43 100

70 99.6 37.4 56.0#

55 90.6 21.8 32.8#

61 0.0 20.6 30.8#

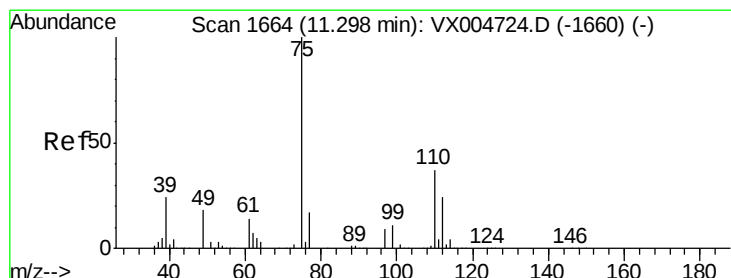
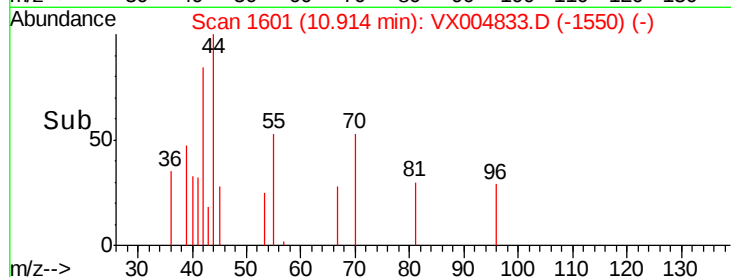
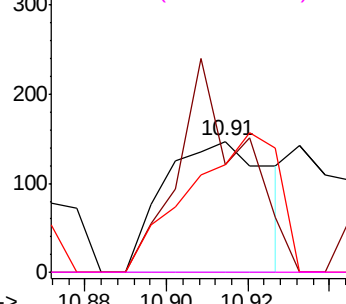


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0



#76

1,2,3-Trichloropropane

Concen: 21.492 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. -0.16 min

Lab File: VX004833.D

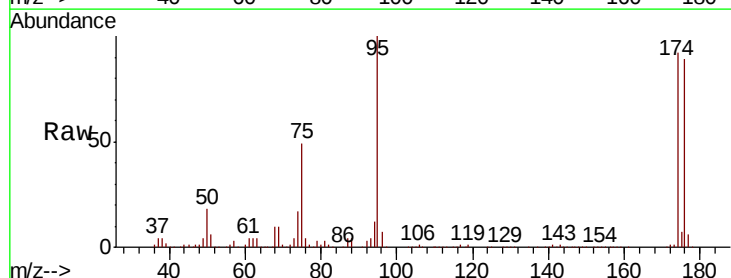
Acq: 28 Sep 2018 20:32

Tgt Ion: 75 Resp: 97542

Ion Ratio Lower Upper

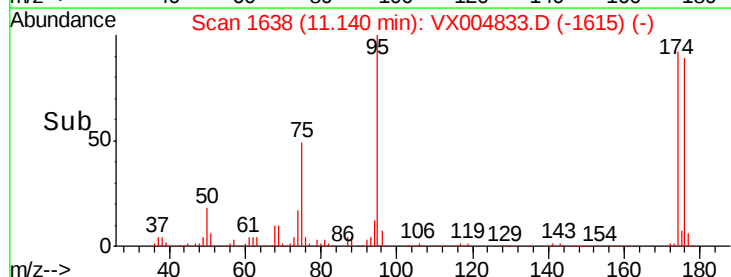
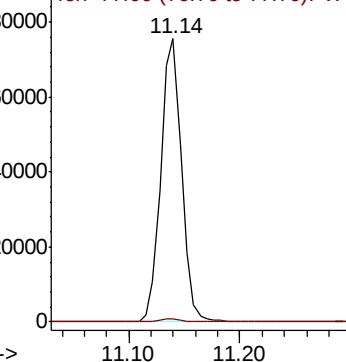
75 100

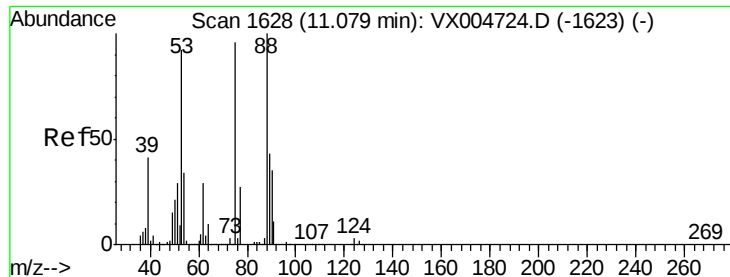
77 1.2 20.2 60.6#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

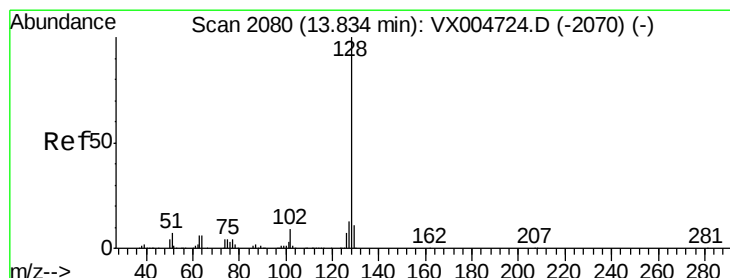
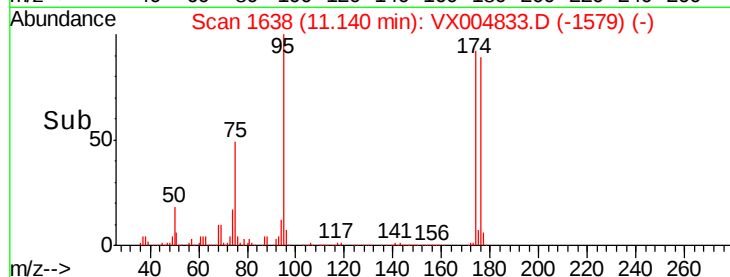
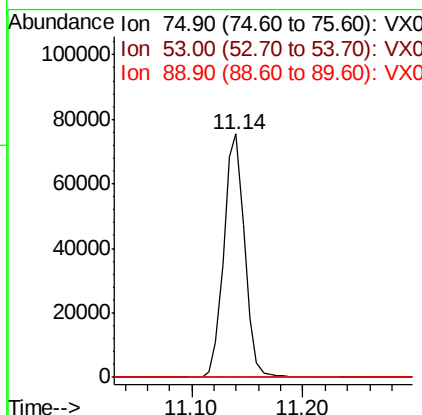
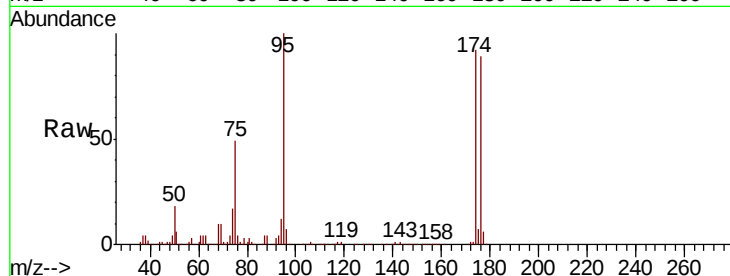




#81  
trans-1,4-Dichloro-2-butene  
Concen: 58.275 ug/l  
RT: 11.14 min Scan# 1638  
Delta R.T. 0.06 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

Instrument :  
MSVOA\_X  
ClientSampled :  
WS-1

Tot Ion: 75 Resp: 97542  
Ion Ratio Lower Upper  
75 100  
53 0.3 80.1 120.1#  
89 0.0 37.2 55.8#



#95  
Naphthalene  
Concen: 0.874 ug/l  
RT: 13.83 min Scan# 2080  
Delta R.T. 0.00 min  
Lab File: VX004833.D  
Acq: 28 Sep 2018 20:32

Tgt Ion:128 Resp: 2643  
Ion Ratio Lower Upper  
128 100  
127 15.6 10.2 15.2#  
129 9.2 8.6 12.8

