

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX032819\  
 Data File : VX008527.D  
 Acq On : 28 Mar 2019 18:09  
 Operator : JC/SP  
 Sample : K2121-05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 MW-7

Quant Time: Mar 29 01:31:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 26 07:57:20 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 228852   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 387451   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 332671   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 140818   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 160660   | 46.31 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.62% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 119198   | 47.18 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.36% |      |
| 50) Toluene-d8            | 8.71   | 98  | 482523   | 47.77 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.54% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 165320   | 44.16 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.32% |      |

## Target Compounds

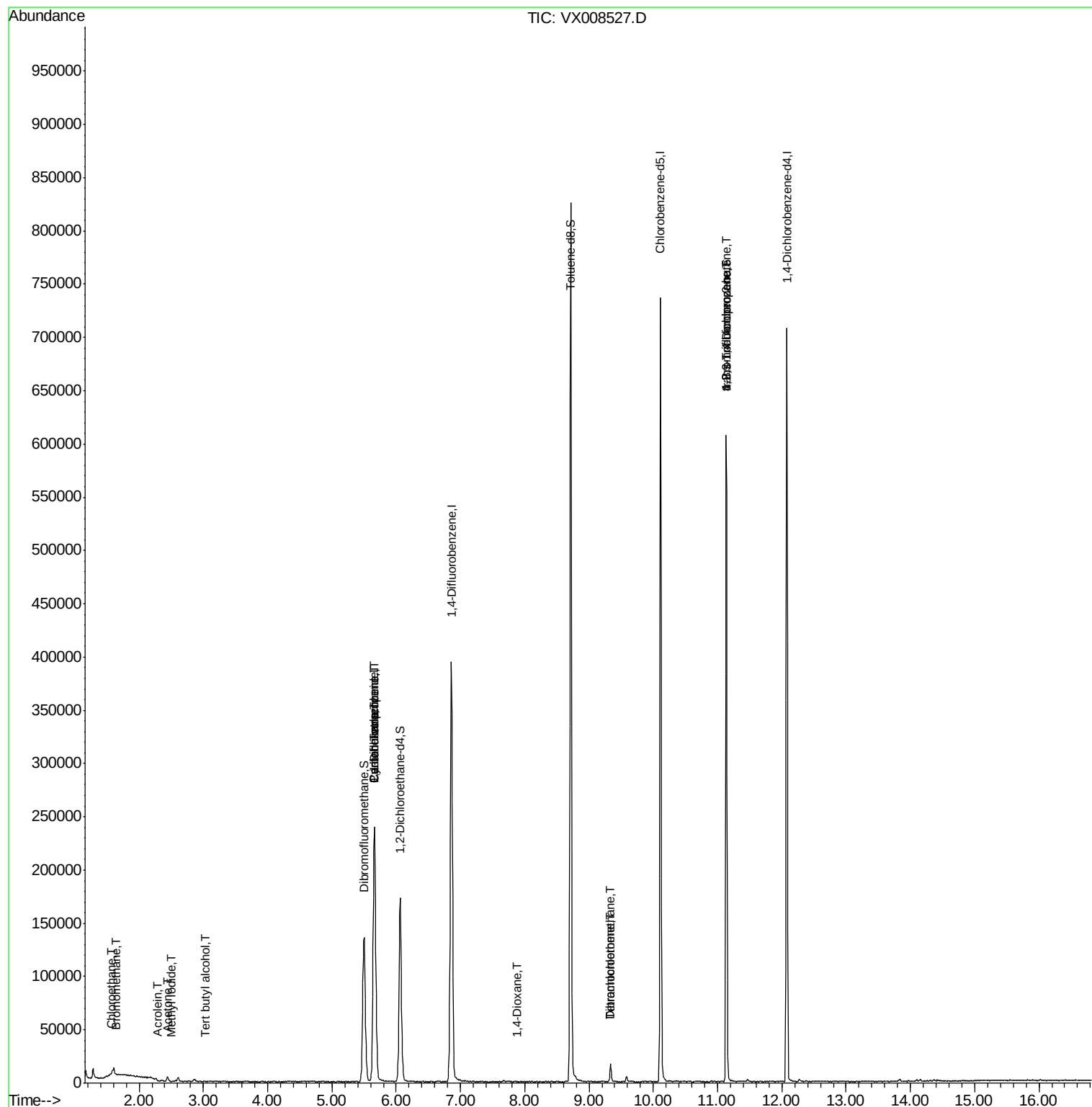
|                                |       |     |       |           | Qvalue |    |
|--------------------------------|-------|-----|-------|-----------|--------|----|
| 3) Chloromethane               | 1.32  | 50  | 371   | Below Cal | #      | 84 |
| 5) Bromomethane                | 1.65  | 94  | 124   | 1.868     | ug/l   | 89 |
| 6) Chloroethane                | 1.56  | 64  | 7753  | 3.475     | ug/l # | 66 |
| 10) Methyl Iodide              | 2.51  | 142 | 70    | 4.155     | ug/l # | 42 |
| 11) Tert butyl alcohol         | 3.03  | 59  | 166   | 0.216     | ug/l   | 97 |
| 13) Acrolein                   | 2.29  | 56  | 387   | 0.693     | ug/l   | 92 |
| 16) Acetone                    | 2.44  | 43  | 4947  | 2.728     | ug/l   | 94 |
| 17) Carbon Disulfide           | 2.57  | 76  | 828   | Below Cal | #      | 67 |
| 20) Methylene Chloride         | 2.85  | 84  | 942   | Below Cal | #      | 93 |
| 21) trans-1,2-Dichloroethene   | 3.10  | 96  | 22    | Below Cal | #      | 1  |
| 31) Cyclohexane                | 5.67  | 56  | 5381  | 0.968     | ug/l # | 1  |
| 36) 1,1-Dichloropropene        | 5.67  | 75  | 19631 | 4.752     | ug/l # | 51 |
| 38) Carbon Tetrachloride       | 5.67  | 117 | 22192 | 6.437     | ug/l # | 15 |
| 49) 1,4-Dioxane                | 7.88  | 88  | 22    | 0.258     | ug/l # | 1  |
| 60) Dibromochloromethane       | 9.34  | 129 | 3434  | 1.200     | ug/l # | 11 |
| 64) Tetrachloroethene          | 9.34  | 164 | 3248  | 1.442     | ug/l # | 91 |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75  | 84432 | 20.168    | ug/l # | 34 |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75  | 84432 | 64.596    | ug/l # | 9  |

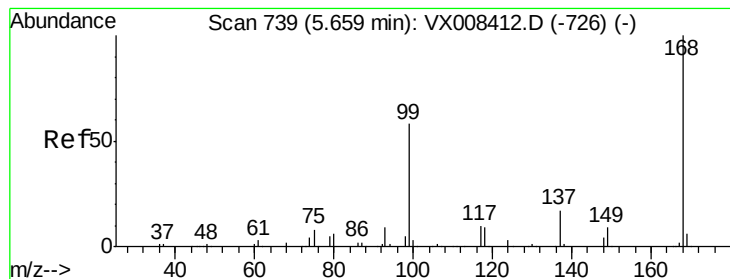
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX032819\  
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Instrument :  
MSVOA\_X  
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MW-7

Quant Time: Mar 29 01:31:22 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X032519W.M  
Quant Title : SW846 8260  
QLast Update : Tue Mar 26 07:57:20 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.00 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampleId :

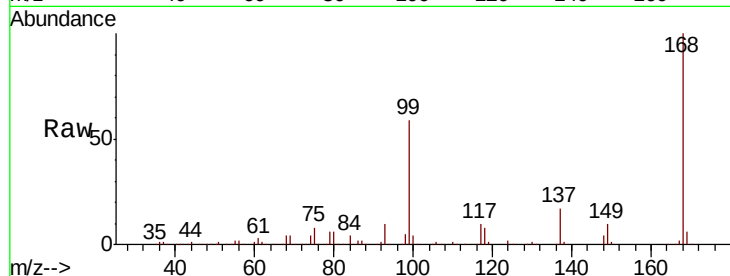
MW-7

Tot Ion:168 Resp: 228852

Ion Ratio Lower Upper

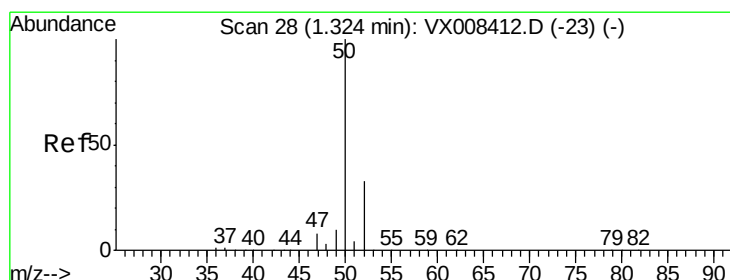
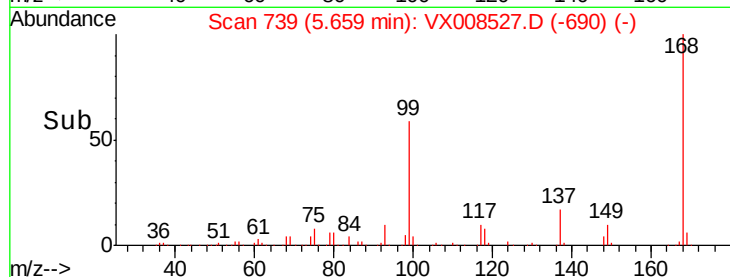
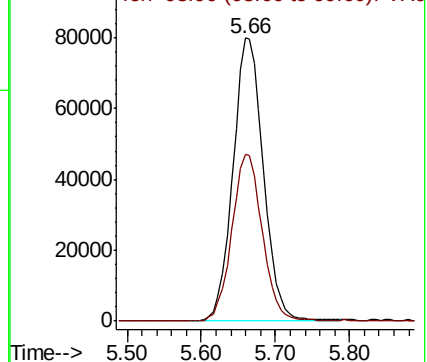
168 100

99 59.0 46.0 69.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX008527.D

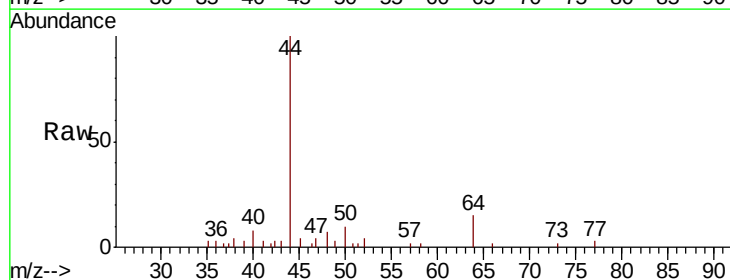
Acq: 28 Mar 2019 18:09

Tgt Ion: 50 Resp: 371

Ion Ratio Lower Upper

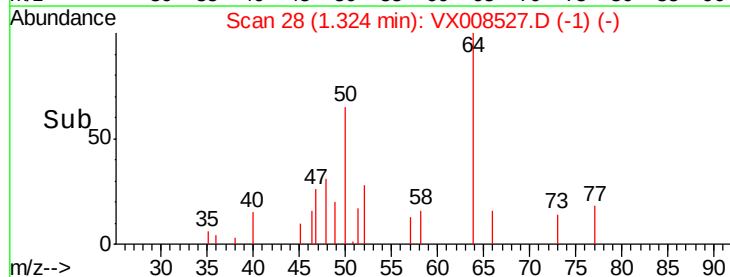
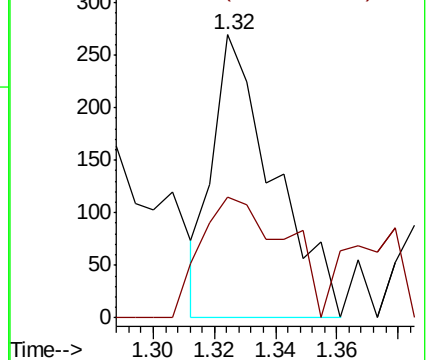
50 100

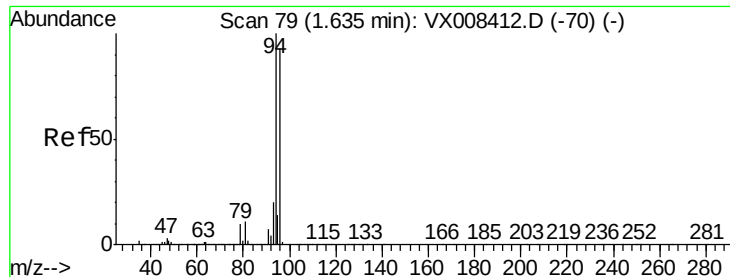
52 23.4 26.2 39.2#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: 1.868 ug/l

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampleId :

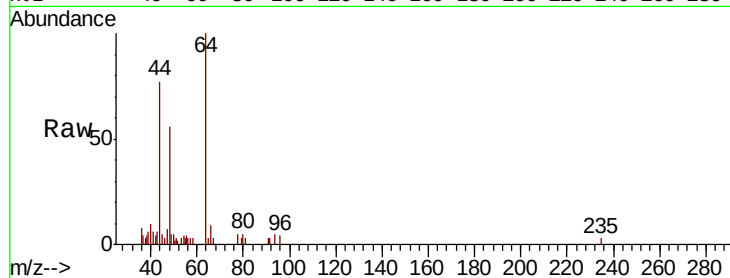
MW-7

Tot Ion: 94 Resp: 124

Ion Ratio Lower Upper

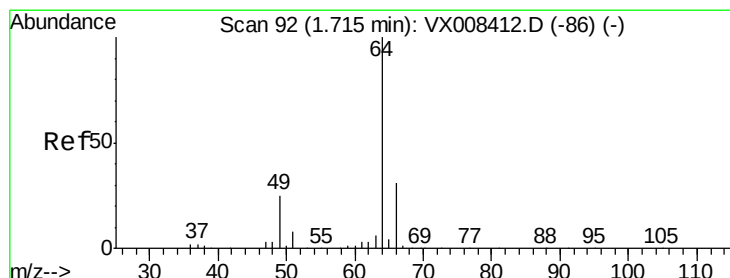
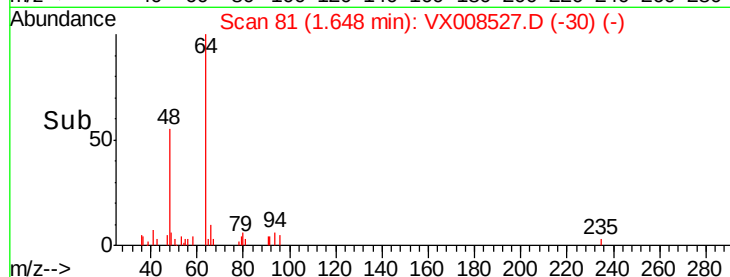
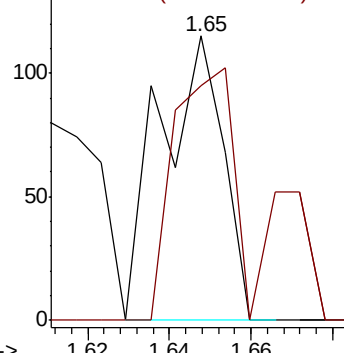
94 100

96 82.6 74.8 112.2



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0



#6

Chloroethane

Concen: 3.475 ug/l

RT: 1.56 min Scan# 66

Delta R.T. -0.16 min

Lab File: VX008527.D

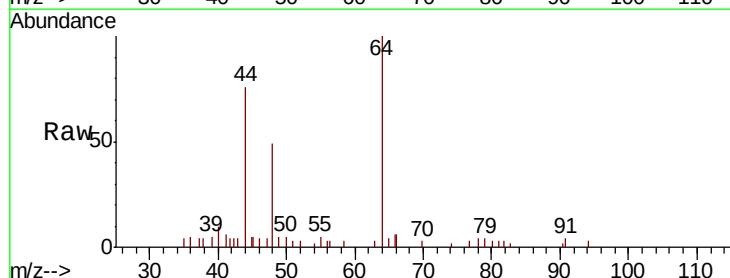
Acq: 28 Mar 2019 18:09

Tgt Ion: 64 Resp: 7753

Ion Ratio Lower Upper

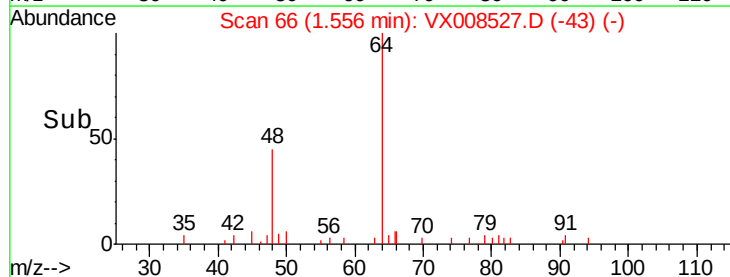
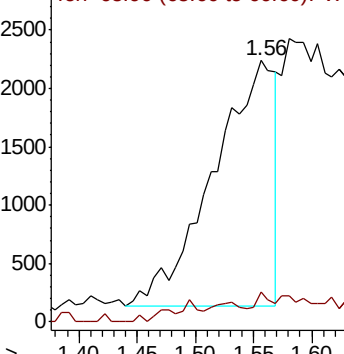
64 100

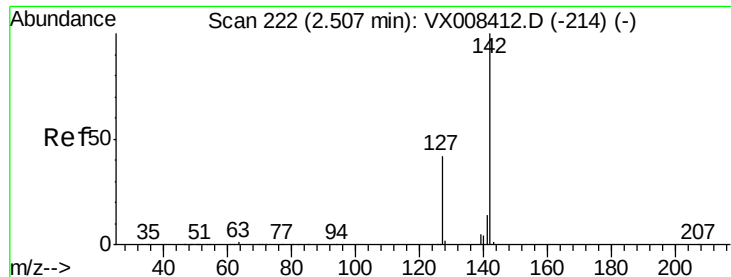
66 12.4 25.1 37.7#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0

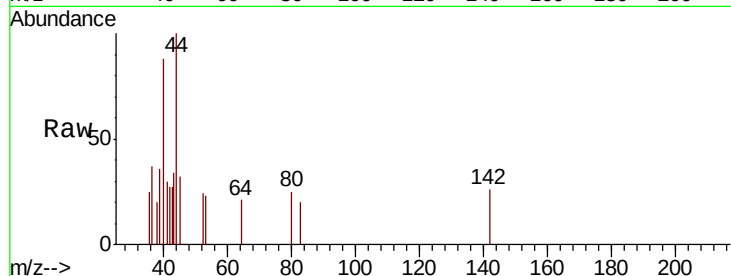




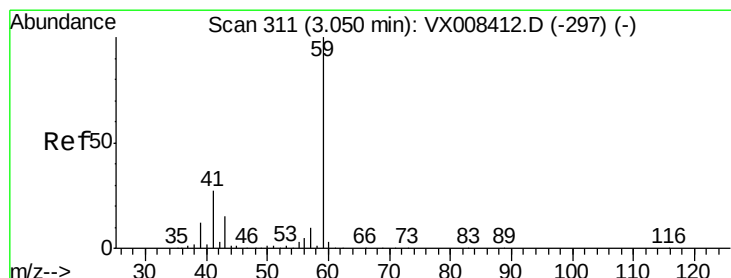
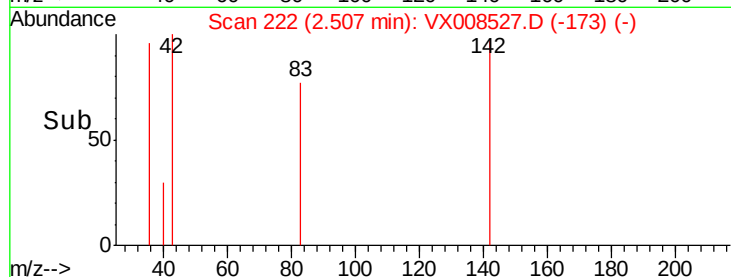
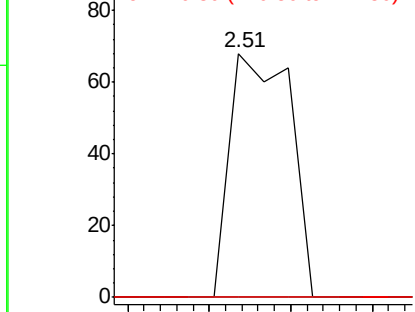
#10  
Methvl Iodide  
Concen: 4.155 ug/l  
RT: 2.51 min Scan# 222  
Delta R.T. 0.00 min  
Lab File: VX008527.D  
Acq: 28 Mar 2019 18:09

Instrument :  
MSVOA\_X  
ClientSampled :  
MW-7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 127     | 0.0   | 33.6  | 50.4# |
| 141     | 0.0   | 11.3  | 16.9# |

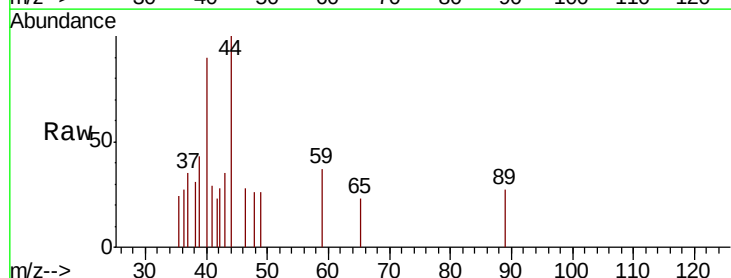


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

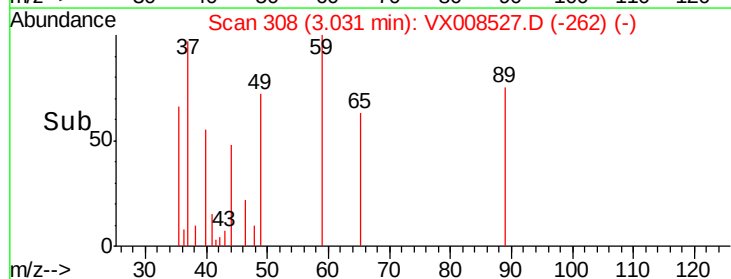
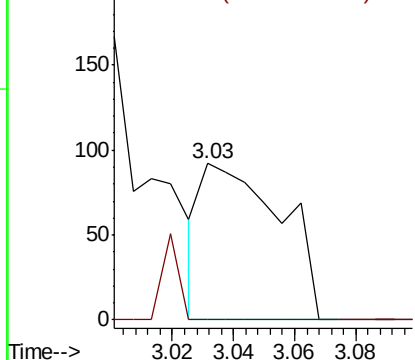


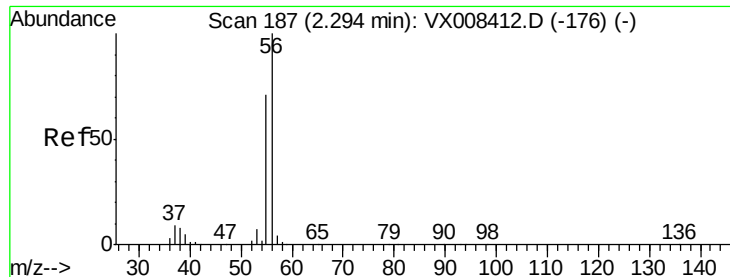
#11  
Tert butyl alcohol  
Concen: 0.216 ug/l  
RT: 3.03 min Scan# 308  
Delta R.T. -0.02 min  
Lab File: VX008527.D  
Acq: 28 Mar 2019 18:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 11.4  | 8.2   | 12.4  |



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





#13

Acrolein

Concen: 0.693 ug/l

RT: 2.29 min Scan# 186

Delta R.T. -0.01 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampled :

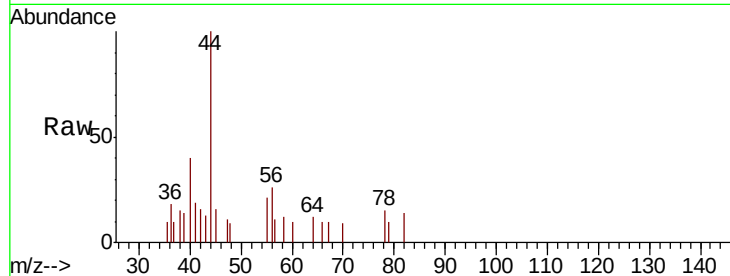
MW-7

Tot Ion: 56 Resp: 387

Ion Ratio Lower Upper

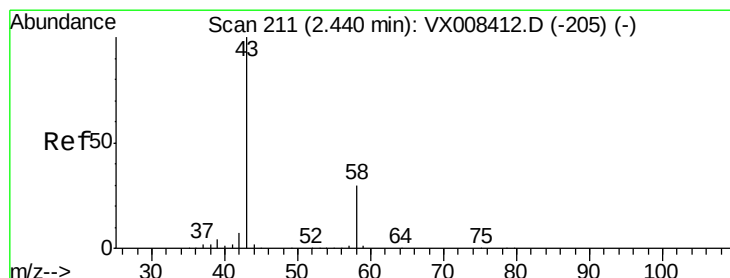
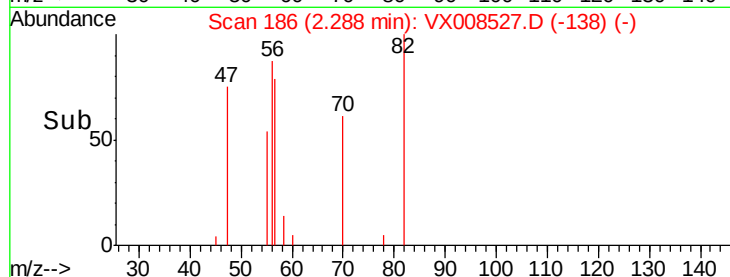
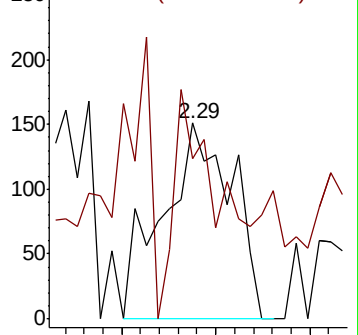
56 100

55 77.0 56.5 84.7



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 2.728 ug/l

RT: 2.44 min Scan# 211

Delta R.T. 0.00 min

Lab File: VX008527.D

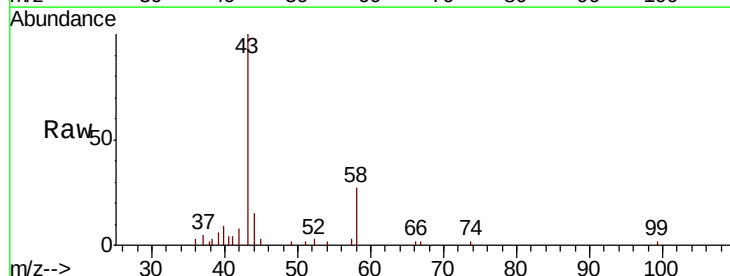
Acq: 28 Mar 2019 18:09

Tgt Ion: 43 Resp: 4947

Ion Ratio Lower Upper

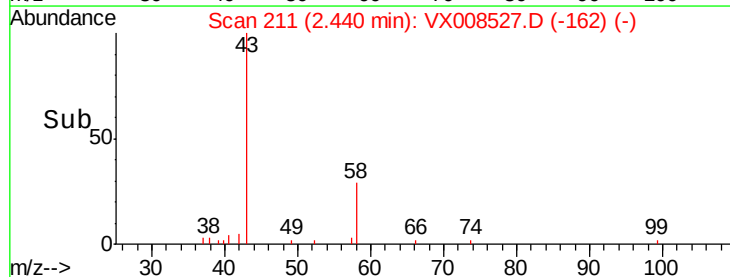
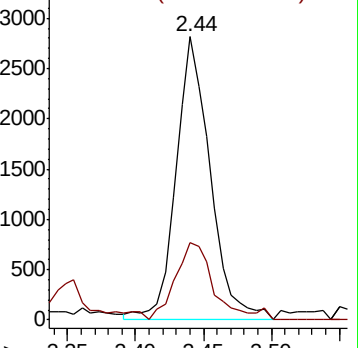
43 100

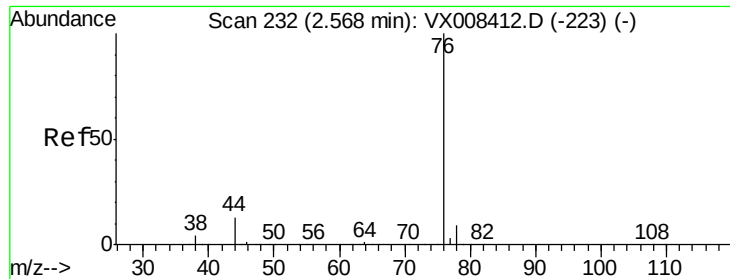
58 27.1 24.2 36.2



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#17

Carbon Disulfide

Concen: Below Cal

RT: 2.57 min Scan# 232

Delta R.T. 0.00 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampled :

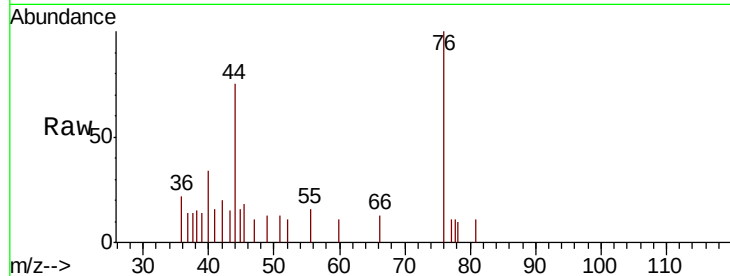
MW-7

Tot Ion: 76 Resp: 828

Ion Ratio Lower Upper

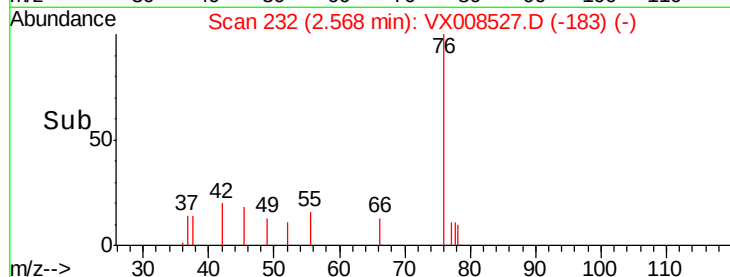
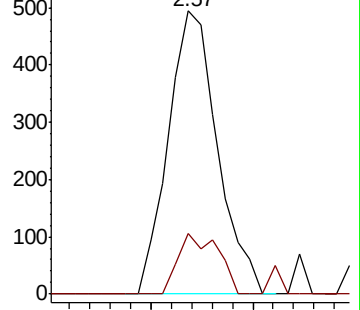
76 100

78 21.5 7.4 11.2#

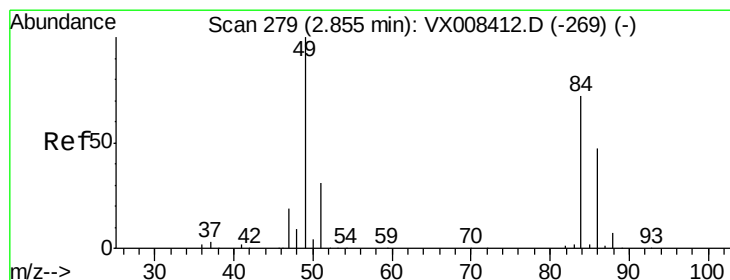


Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0



Time-->



#20

Methylene Chloride

Concen: Below Cal

RT: 2.85 min Scan# 279

Delta R.T. 0.00 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Tgt Ion: 84 Resp: 942

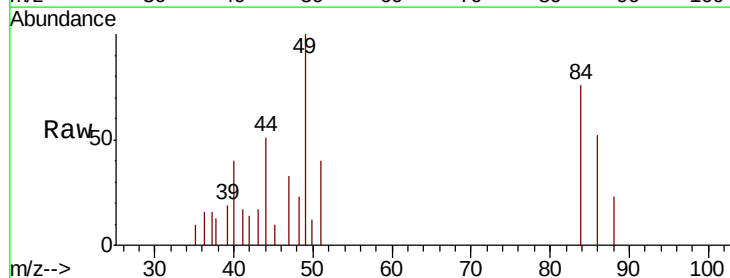
Ion Ratio Lower Upper

84 100

49 131.9 110.6 165.8

51 52.5 33.9 50.9#

86 68.6 52.2 78.2

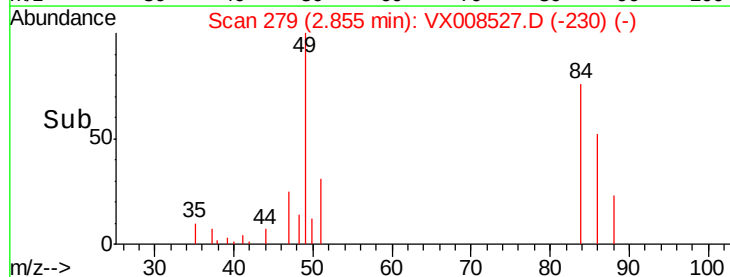
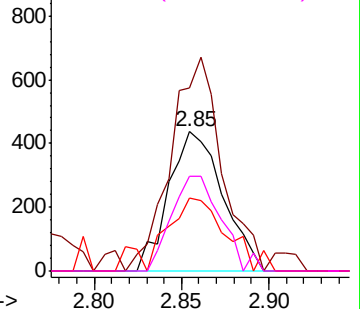


Abundance Ion 83.90 (83.60 to 84.60): VX0

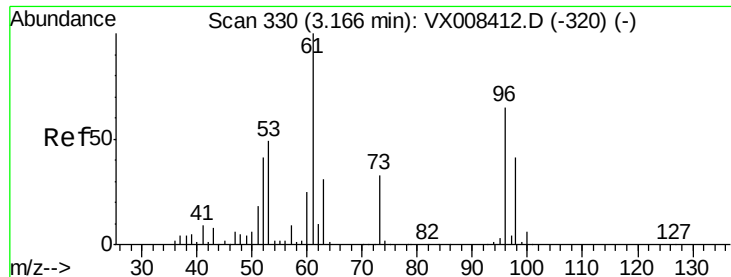
Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0



Time-->



#21

trans-1,2-Dichloroethene

Concen: Below Cal

RT: 3.10 min Scan# 320

Delta R.T. -0.06 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampleId :

MW-7

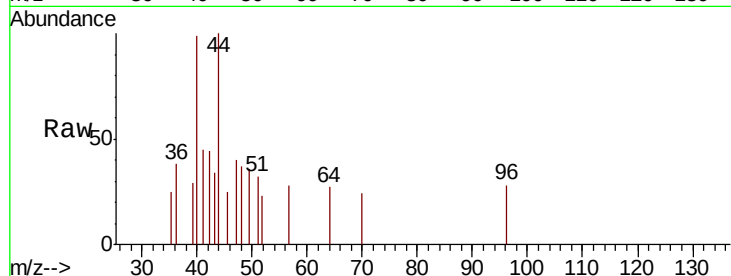
Tot Ion: 96 Resp: 22

Ion Ratio Lower Upper

96 100

61 0.0 122.6 184.0#

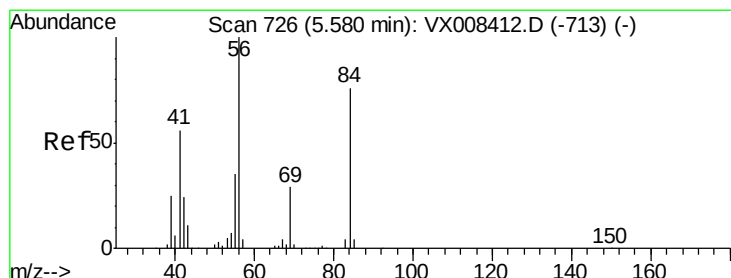
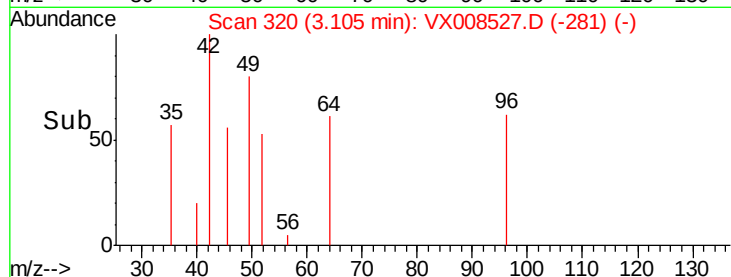
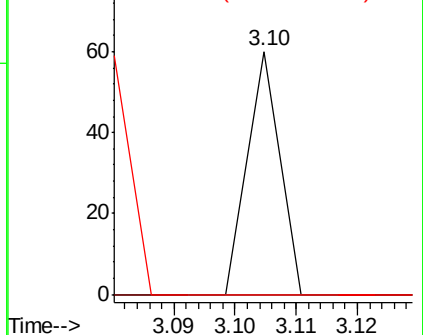
98 0.0 50.9 76.3#



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



#31

Cyclohexane

Concen: 0.968 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.09 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

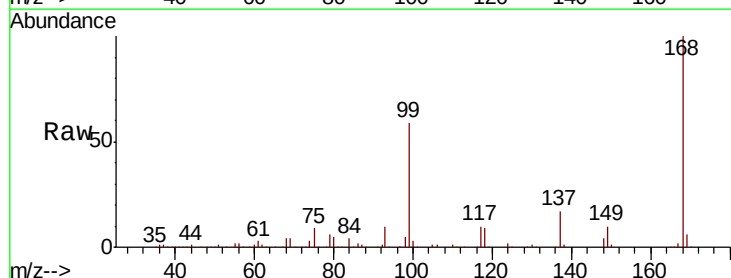
Tgt Ion: 56 Resp: 5381

Ion Ratio Lower Upper

56 100

69 173.7 23.2 34.8#

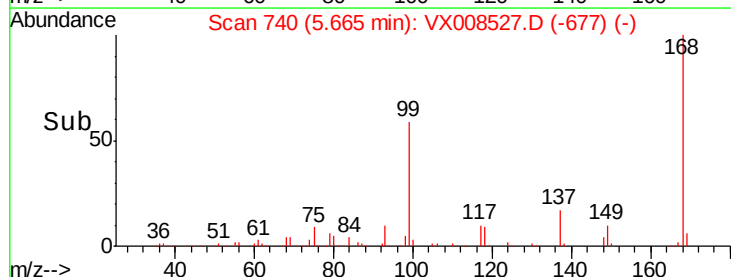
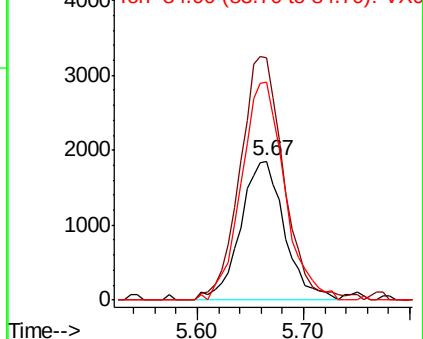
84 156.3 60.7 91.1#



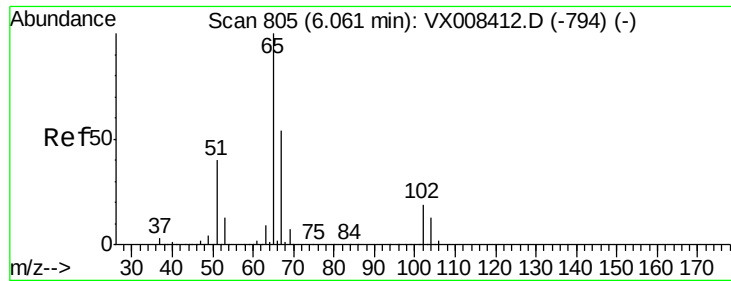
Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0



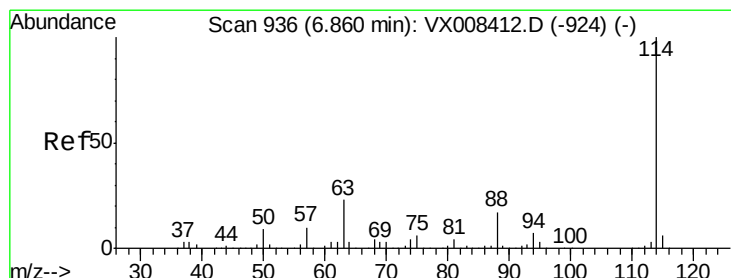
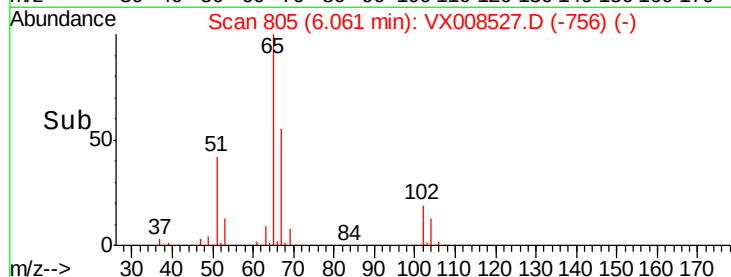
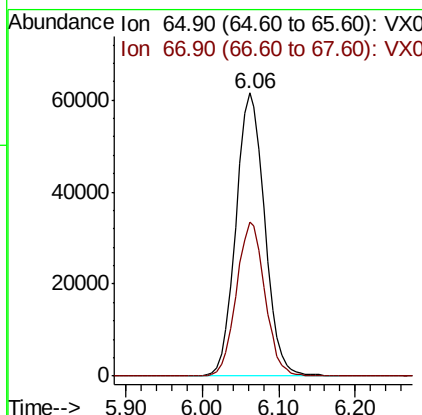
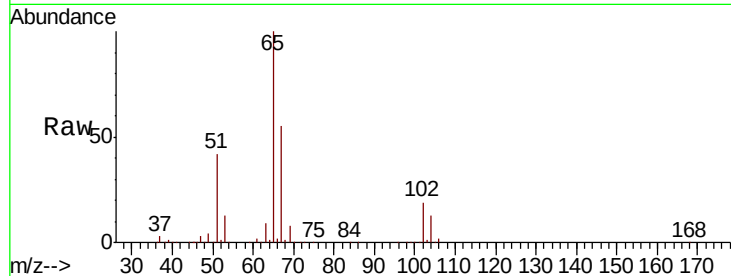




#33  
 1,2-Dichloroethane-d4  
 Concen: 46.307 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. 0.00 min  
 Lab File: VX008527.D  
 Acq: 28 Mar 2019 18:09

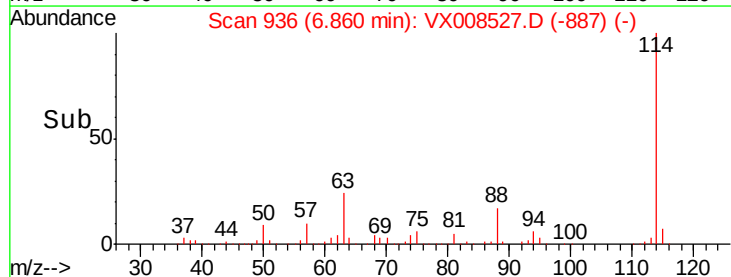
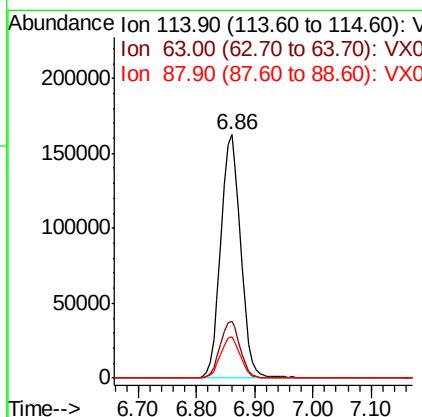
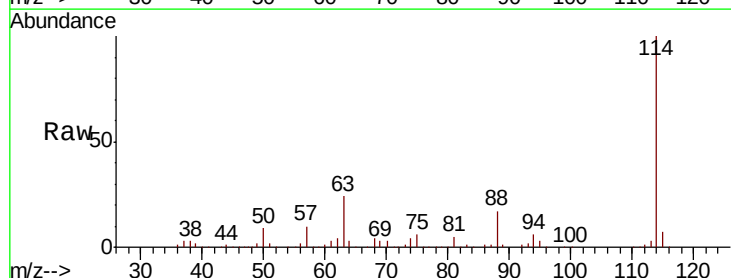
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 MW-7

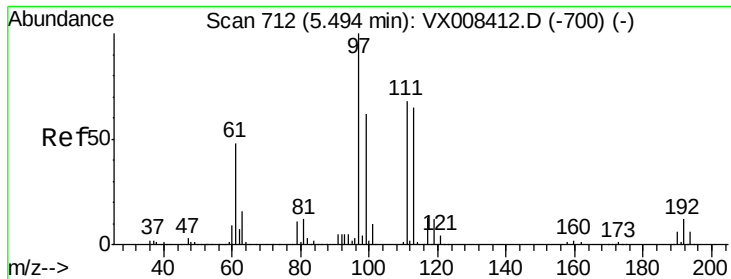
Tot Ion: 65 Resp: 160660  
 Ion Ratio Lower Upper  
 65 100  
 67 53.9 0.0 109.4



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX008527.D  
 Acq: 28 Mar 2019 18:09

Tgt Ion: 114 Resp: 387451  
 Ion Ratio Lower Upper  
 114 100  
 63 23.5 0.0 46.4  
 88 17.0 0.0 33.2





#35

Dibromofluoromethane

Concen: 47.182 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.01 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampleId :

MW-7

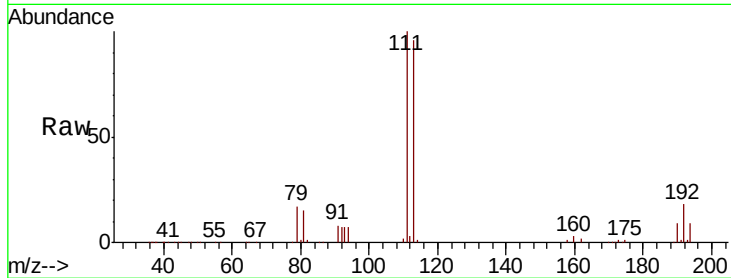
Tot Ion:113 Resp: 119198

Ion Ratio Lower Upper

113 100

111 102.3 83.0 124.4

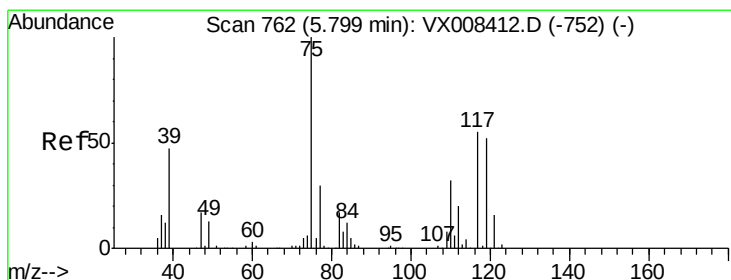
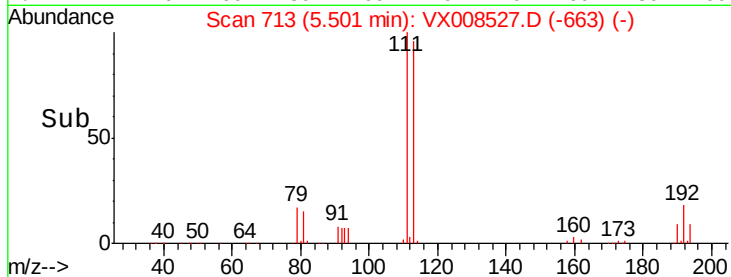
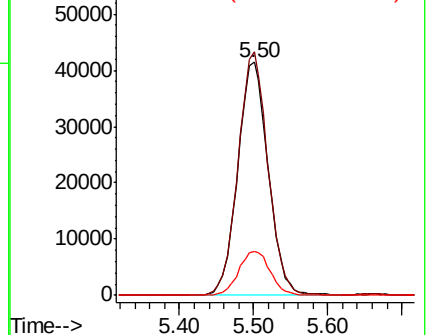
192 19.3 15.6 23.4



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: 4.752 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

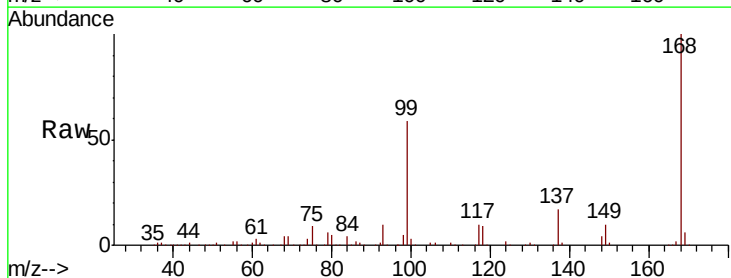
Tgt Ion: 75 Resp: 19631

Ion Ratio Lower Upper

75 100

110 8.8 16.6 49.7#

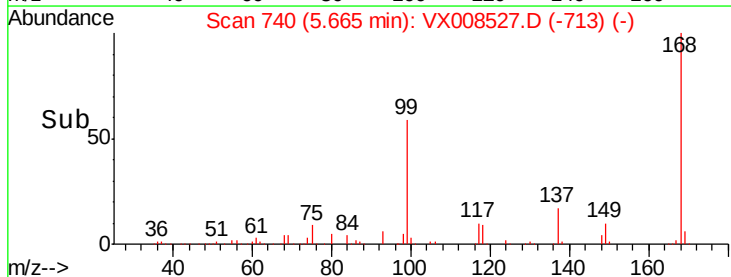
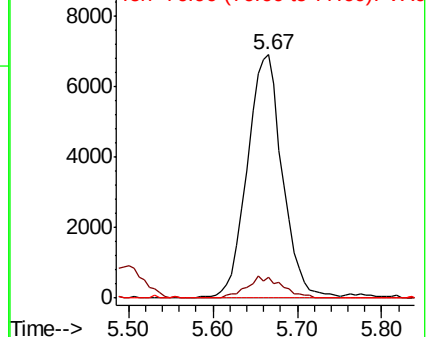
77 0.0 24.2 36.2#

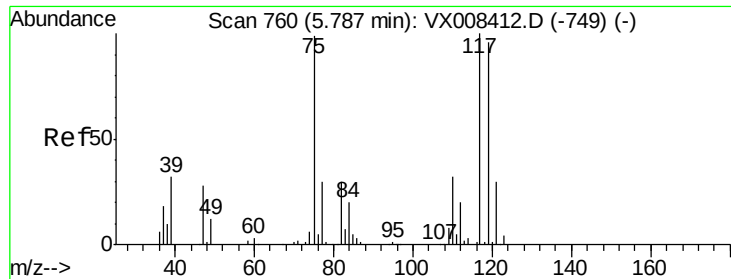


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.437 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampled :

MW-7

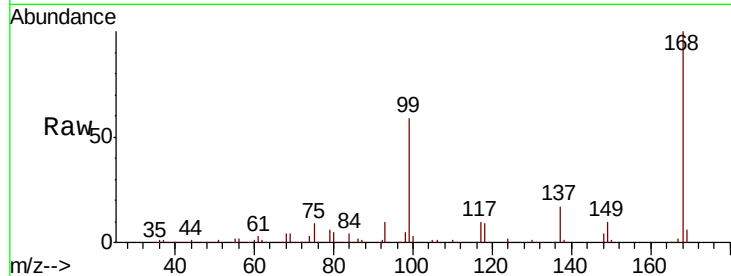
Tot Ion:117 Resp: 22192

Ion Ratio Lower Upper

117 100

119 4.5 76.7 115.1#

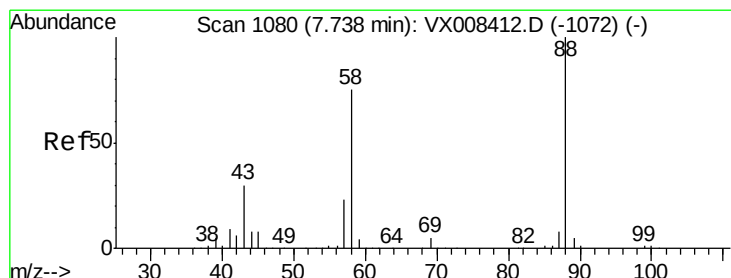
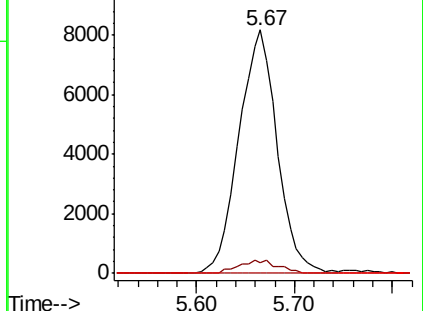
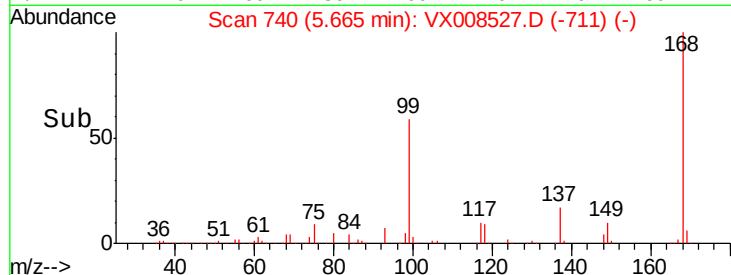
121 0.0 24.3 36.5#



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: 0.258 ug/l

RT: 7.88 min Scan# 1104

Delta R.T. 0.15 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

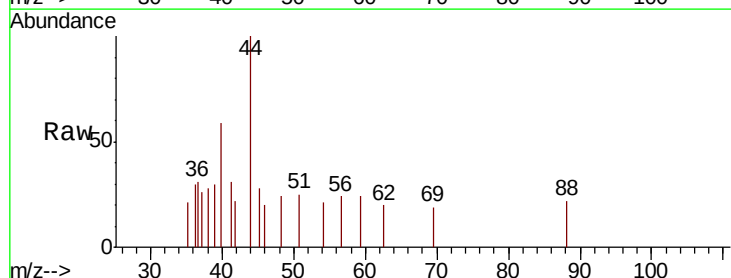
Tgt Ion: 88 Resp: 22

Ion Ratio Lower Upper

88 100

43 1072.7 28.6 43.0#

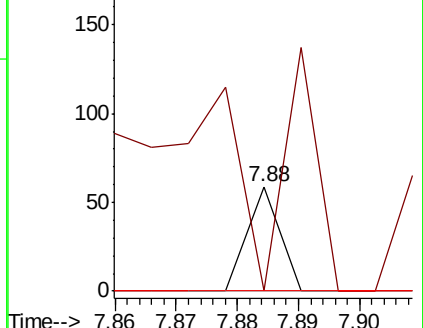
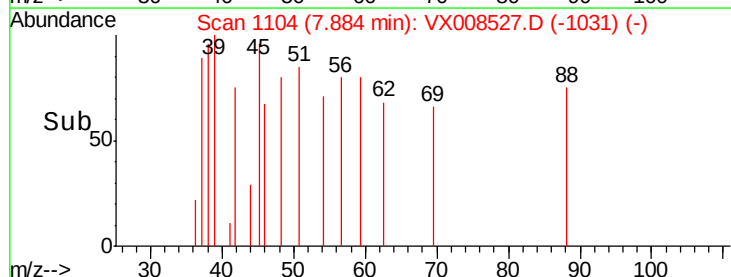
58 0.0 63.0 94.4#

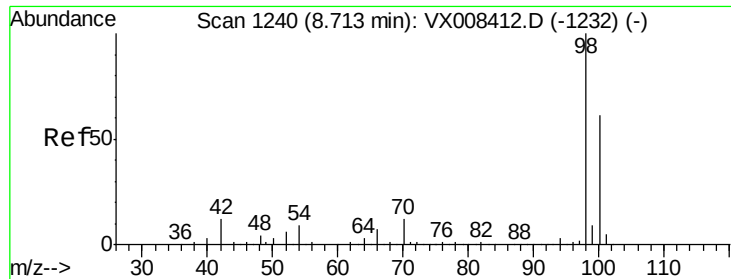


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

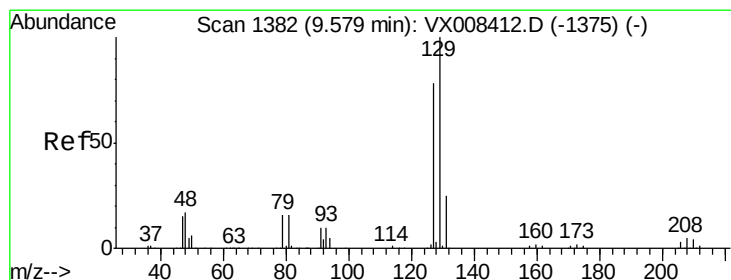
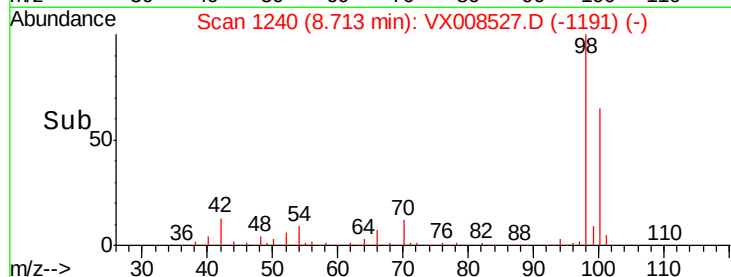
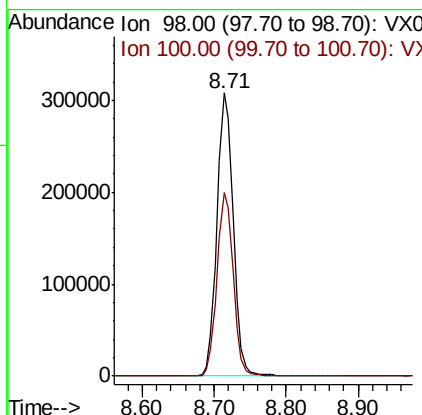
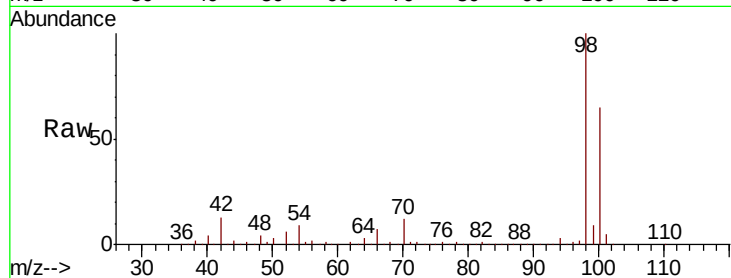




#50  
Toluene-d8  
Concen: 47.766 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX008527.D  
Acq: 28 Mar 2019 18:09

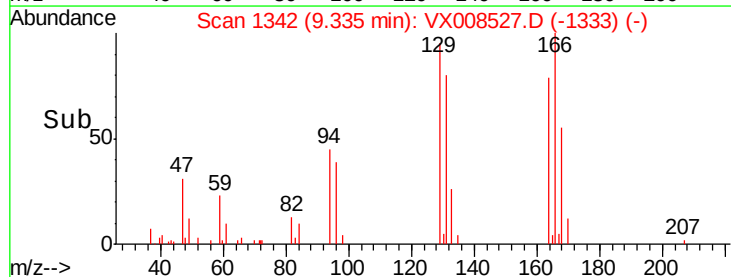
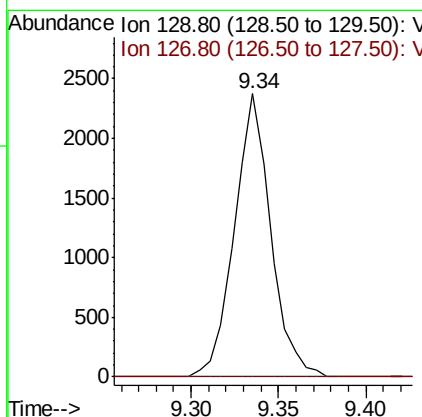
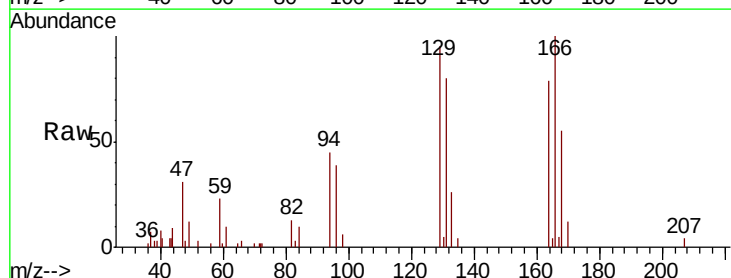
Instrument :  
MSVOA\_X  
ClientSampled :  
MW-7

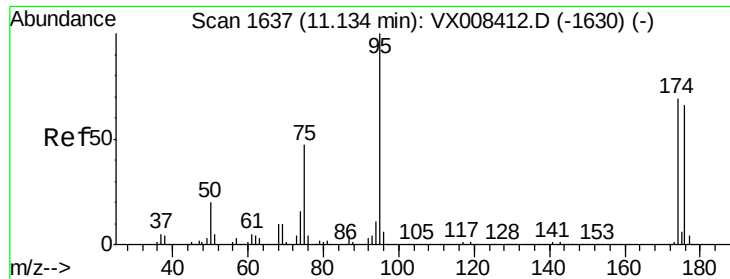
Tot Ion: 98 Resp: 482523  
Ion Ratio Lower Upper  
98 100  
100 64.5 51.1 76.7



#60  
Dibromochloromethane  
Concen: 1.200 ug/l  
RT: 9.34 min Scan# 1342  
Delta R.T. -0.24 min  
Lab File: VX008527.D  
Acq: 28 Mar 2019 18:09

Tgt Ion:129 Resp: 3434  
Ion Ratio Lower Upper  
129 100  
127 0.0 38.1 114.3#

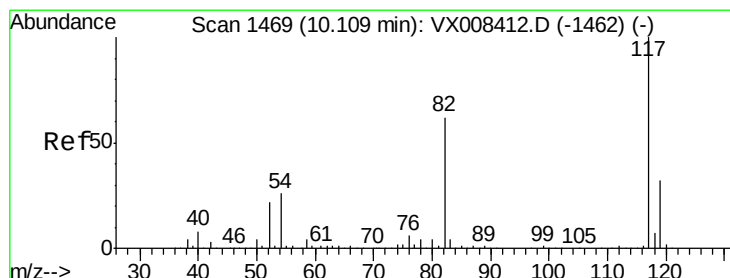
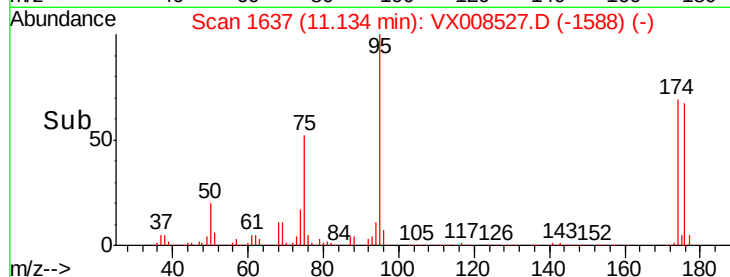
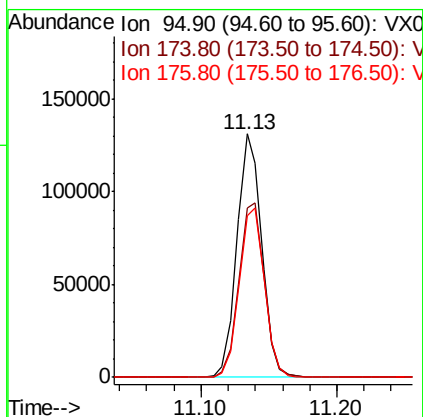
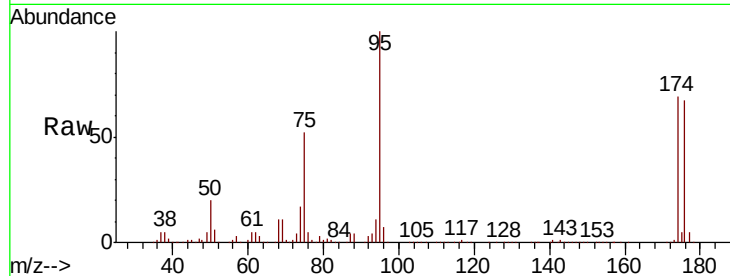




#62  
4-Bromofluorobenzene  
Concen: 44.163 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. 0.00 min  
Lab File: VX008527.D  
Acq: 28 Mar 2019 18:09

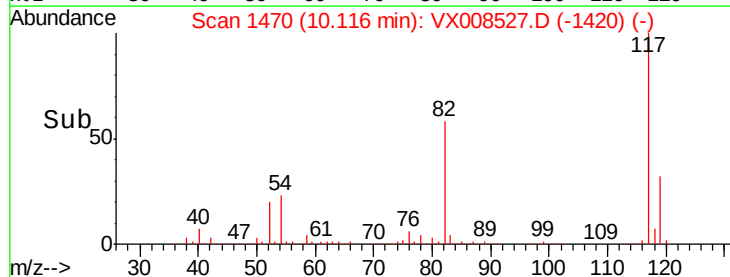
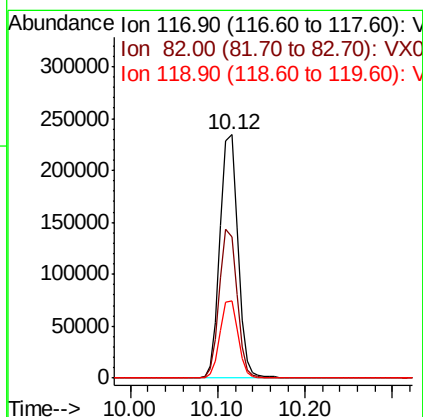
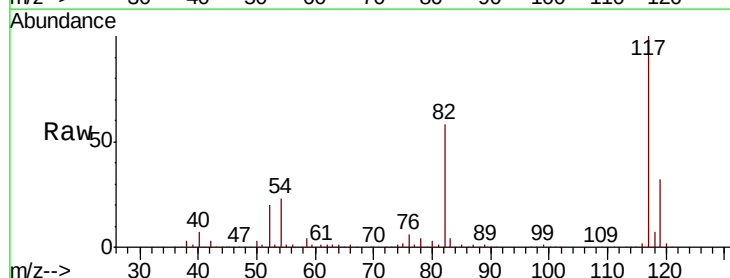
Instrument :  
MSVOA\_X  
ClientSampleId :  
MW-7

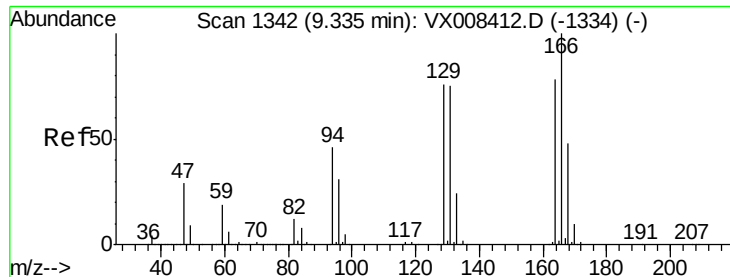
Tot Ion: 95 Resp: 165320  
Ion Ratio Lower Upper  
95 100  
174 73.9 0.0 147.2  
176 71.4 0.0 142.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.12 min Scan# 1470  
Delta R.T. 0.01 min  
Lab File: VX008527.D  
Acq: 28 Mar 2019 18:09

Tgt Ion: 117 Resp: 332671  
Ion Ratio Lower Upper  
117 100  
82 58.1 49.4 74.2  
119 31.9 25.4 38.0





#64

Tetrachloroethene

Concen: 1.442 ug/l

RT: 9.34 min Scan# 1342

Delta R.T. 0.00 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampleId :

MW-7

Tot Ion:164 Resp: 3248

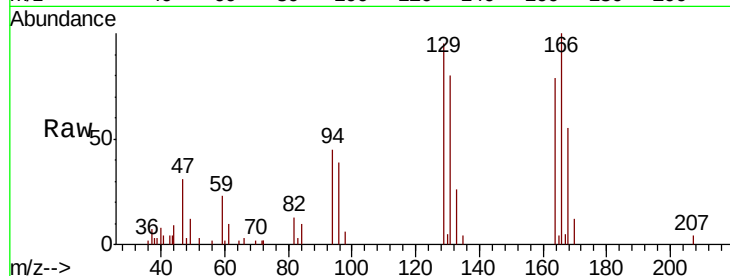
Ion Ratio Lower Upper

164 100

166 126.2 102.5 153.7

129 119.7 77.8 116.8#

131 101.2 76.9 115.3



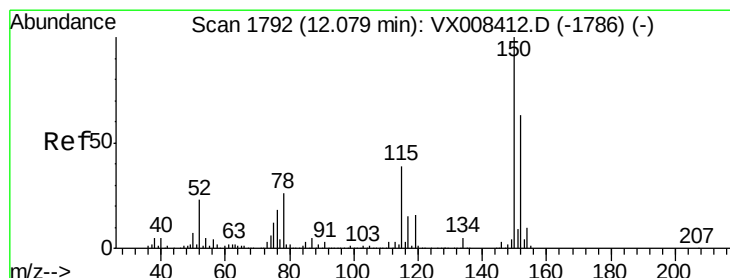
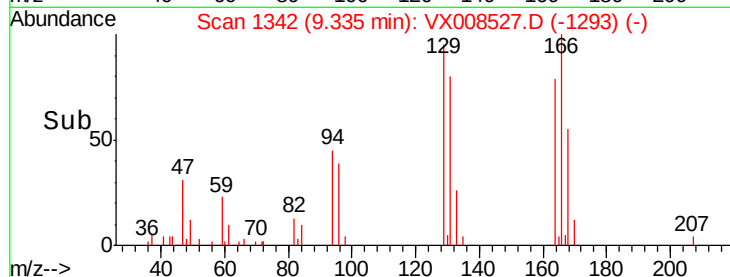
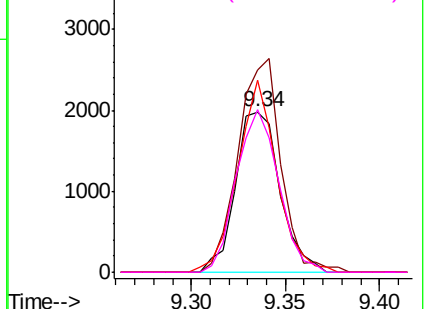
Abundance

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: VX008527.D

Acq: 28 Mar 2019 18:09

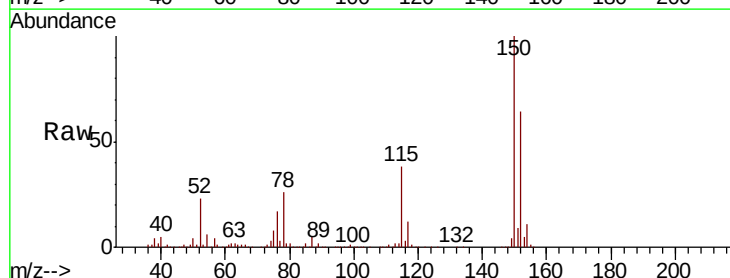
Tgt Ion:152 Resp: 140818

Ion Ratio Lower Upper

152 100

115 61.3 43.5 130.5

150 156.0 0.0 348.8

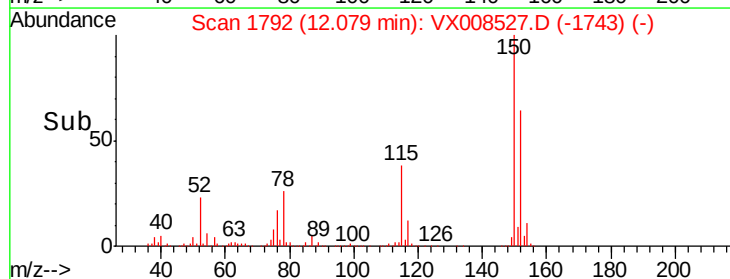
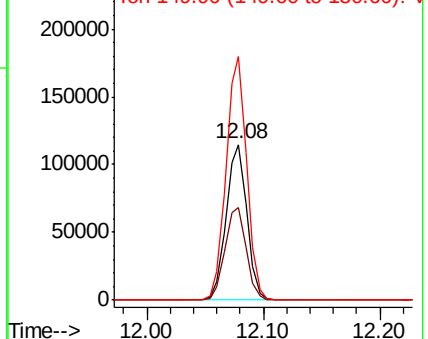


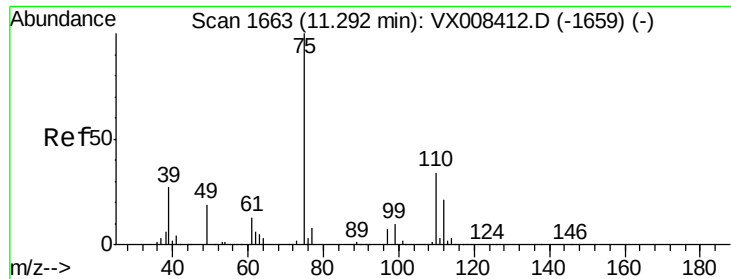
Abundance

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: 20.168 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Instrument :

MSVOA\_X

ClientSampleId :

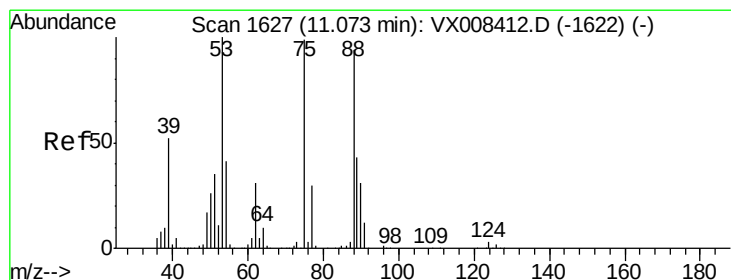
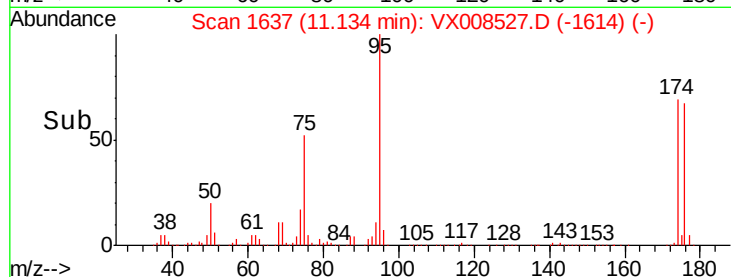
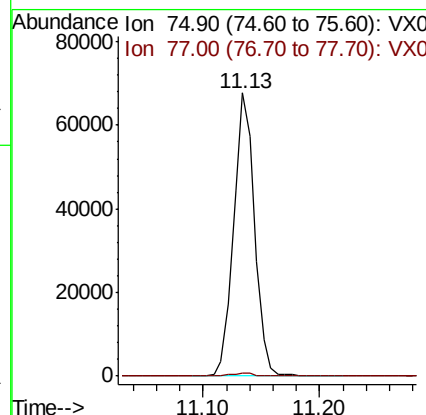
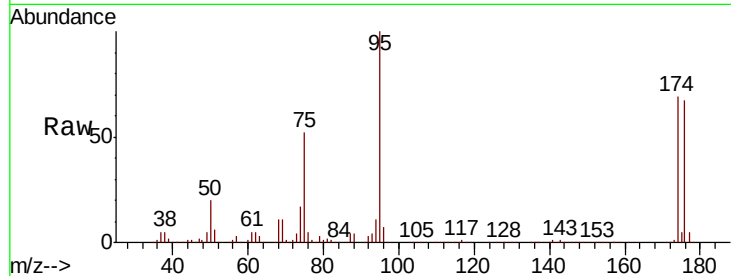
MW-7

Tot Ion: 75 Resp: 84432

Ion Ratio Lower Upper

75 100

77 1.3 21.9 65.7#



#81

trans-1,4-Dichloro-2-butene

Concen: 64.596 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008527.D

Acq: 28 Mar 2019 18:09

Tgt Ion: 75 Resp: 84432

Ion Ratio Lower Upper

75 100

53 0.1 82.1 123.1#

89 0.0 34.6 52.0#

