

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX040419\  
 Data File : VX008664.D  
 Acq On : 05 Apr 2019 02:59  
 Operator : JC/SP  
 Sample : K2274-13  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 45 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SS037MW042-190403

Quant Time: Apr 05 07:14:53 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X040319W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Apr 04 04:47:41 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 215364   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 360609   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 314523   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 131429   | 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   | 149661   | 47.64 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.28% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 109534   | 47.51 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.02% |          |
| 50) Toluene-d8              | 8.71  | 98   | 450633   | 49.09 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.18% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 154104   | 47.34 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.68% |          |

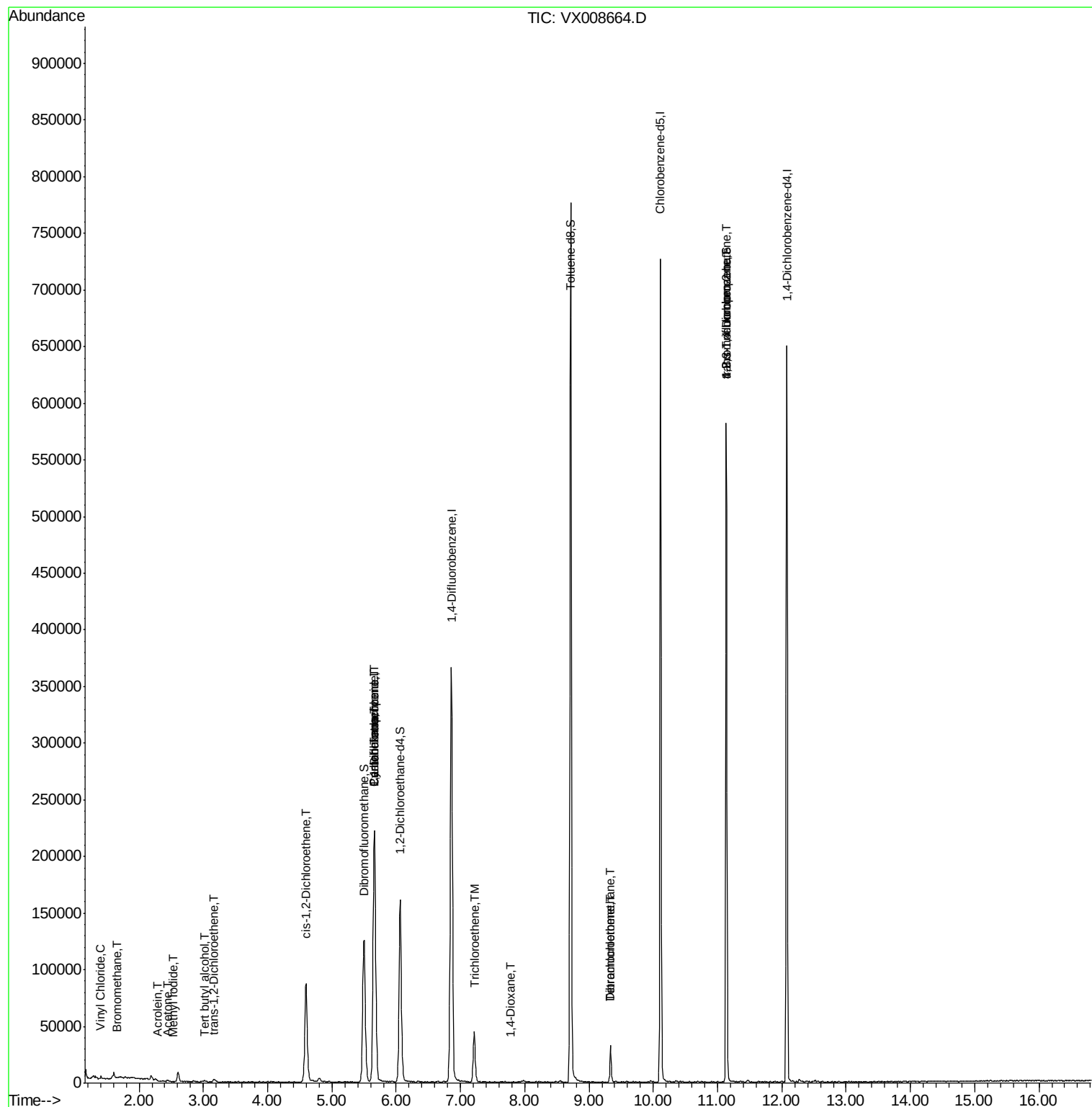
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 1314     | Below Cal | #      | 71     |
| 4) Vinyl Chloride              | 1.41  | 62   | 1480     | 0.442     | ug/l # | 83     |
| 5) Bromomethane                | 1.65  | 94   | 318      | 2.071     | ug/l # | 70     |
| 6) Chloroethane                | 1.66  | 64   | 1880     | Below Cal | #      | 66     |
| 10) Methyl Iodide              | 2.52  | 142  | 22       | 4.012     | ug/l # | 42     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 865      | 1.176     | ug/l # | 72     |
| 13) Acrolein                   | 2.29  | 56   | 106      | 0.291     | ug/l   | 90     |
| 16) Acetone                    | 2.44  | 43   | 1799     | 0.994     | ug/l   | 94     |
| 17) Carbon Disulfide           | 2.57  | 76   | 558      | Below Cal | #      | 74     |
| 21) trans-1,2-Dichloroethene   | 3.17  | 96   | 875      | 0.325     | ug/l   | 82     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 53495    | 17.277    | ug/l   | 90     |
| 28) Bromochloromethane         | 5.02  | 49   | 37       | Below Cal | #      | 22     |
| 31) Cyclohexane                | 5.66  | 56   | 5078     | 0.936     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 17791    | 4.513     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 20773    | 6.367     | ug/l # | 17     |
| 44) Trichloroethene            | 7.21  | 130  | 16942    | 6.194     | ug/l   | 97     |
| 49) 1,4-Dioxane                | 7.77  | 88   | 20       | 0.256     | ug/l # | 1      |
| 60) Dibromochloromethane       | 9.34  | 129  | 5807     | 2.217     | ug/l # | 11     |
| 64) Tetrachloroethene          | 9.34  | 164  | 6050     | 2.596     | ug/l   | 98     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 78494    | 21.741    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 78494    | 59.929    | ug/l # | 9      |

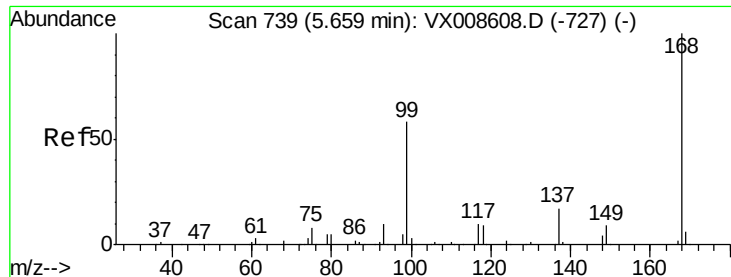
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Thu Apr 04 04:47:41 2019  
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: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

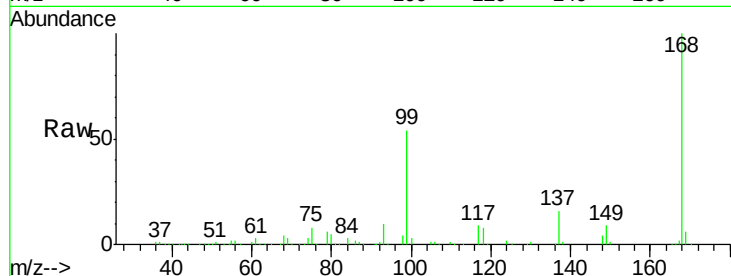
SS037MW042-190403

Tgt Ion:168 Resp: 215364

Ion Ratio Lower Upper

168 100

99 54.3 46.7 70.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.67

80000

60000

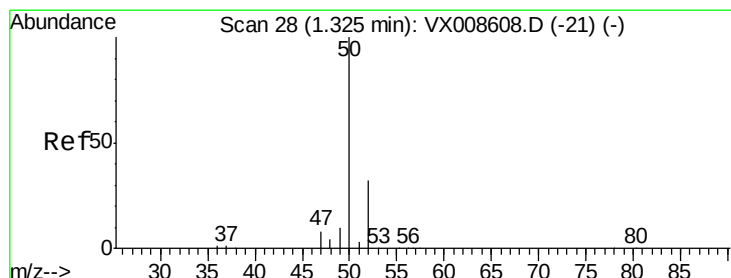
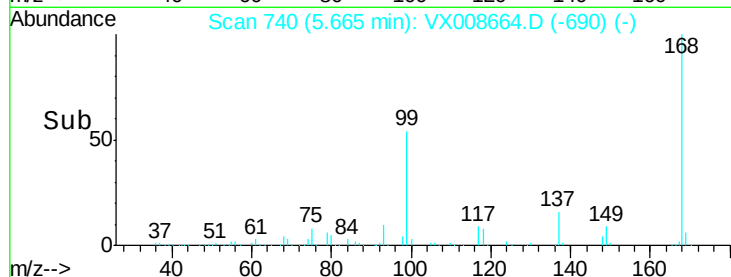
40000

20000

0

Time-->

5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 28

Delta R.T. 0.00 min

Lab File: VX008664.D

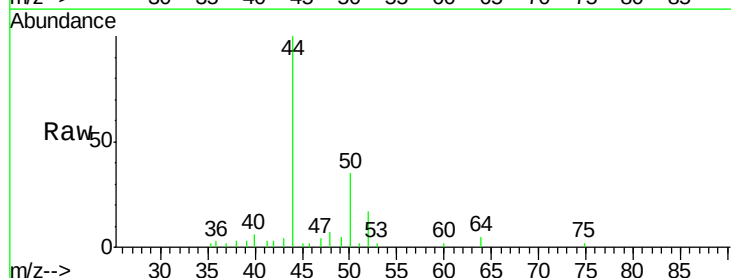
Acq: 05 Apr 2019 02:59

Tgt Ion: 50 Resp: 1314

Ion Ratio Lower Upper

50 100

52 48.7 25.8 38.8#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

1200

1000

800

600

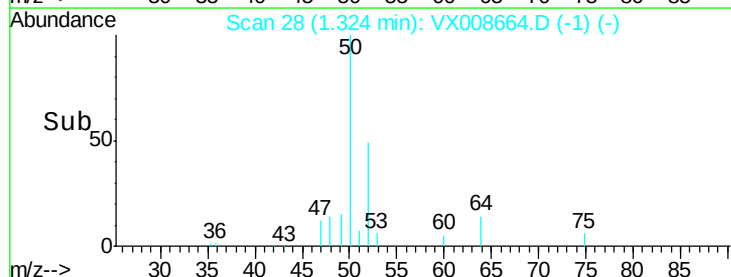
400

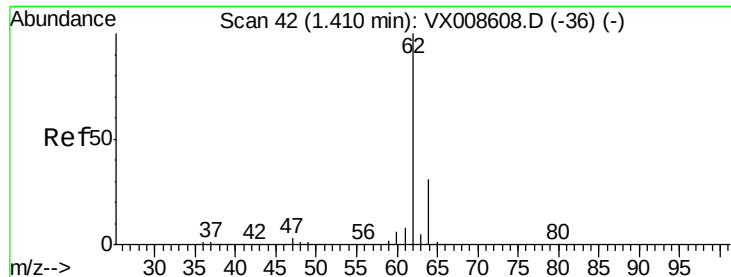
200

0

Time-->

1.30 1.35 1.40





#4

Vinyl Chloride

Concen: 0.442 ug/l

RT: 1.41 min Scan# 42

Delta R.T. -0.00 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

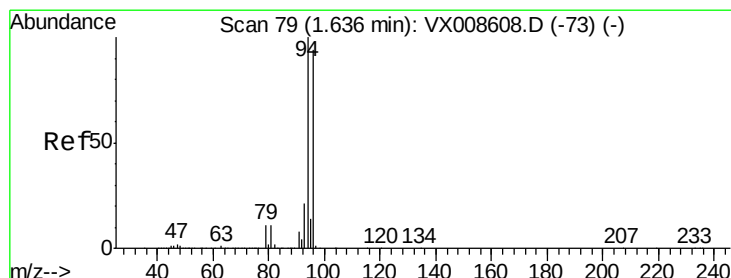
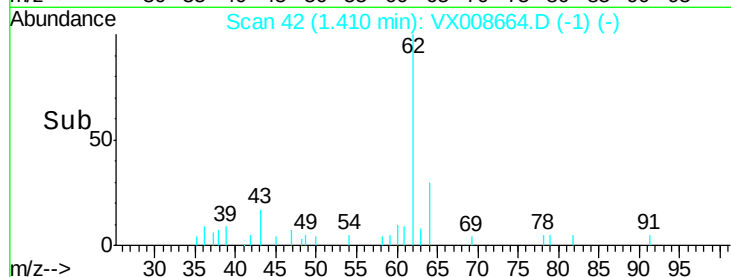
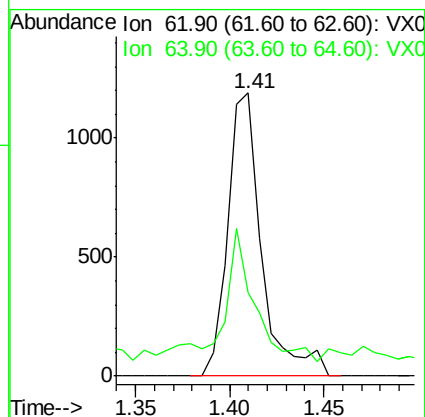
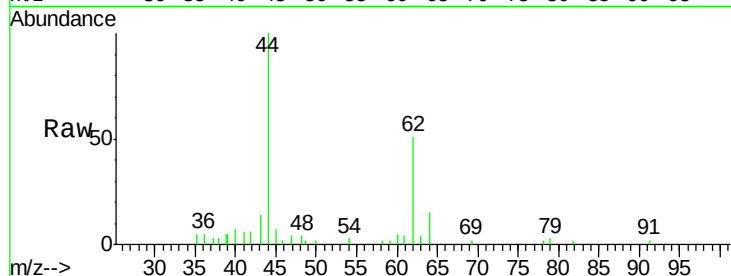
SS037MW042-190403

Tgt Ion: 62 Resp: 1480

Ion Ratio Lower Upper

62 100

64 21.4 24.7 37.1#



#5

Bromomethane

Concen: 2.071 ug/l

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX008664.D

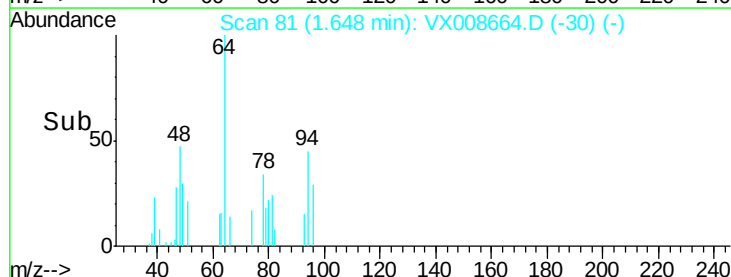
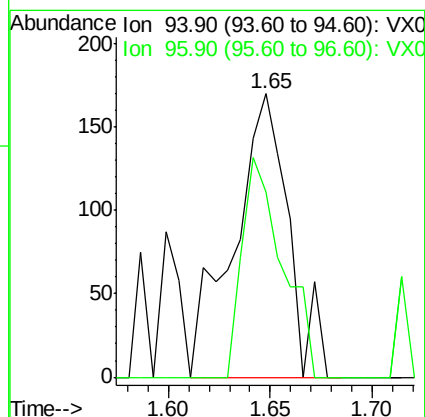
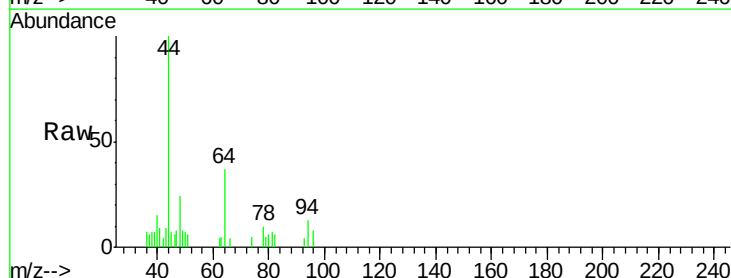
Acq: 05 Apr 2019 02:59

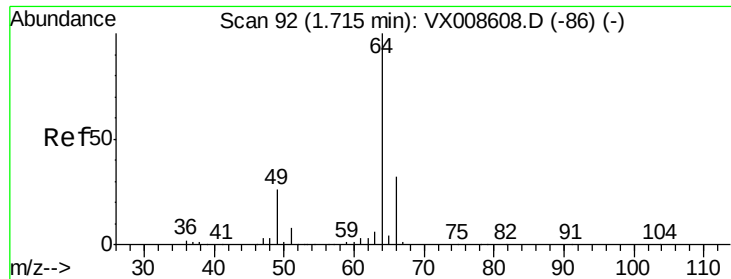
Tgt Ion: 94 Resp: 318

Ion Ratio Lower Upper

94 100

96 65.3 75.2 112.8#





#6

Chloroethane

Concen: Below Cal

RT: 1.66 min Scan# 83

Delta R.T. -0.05 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

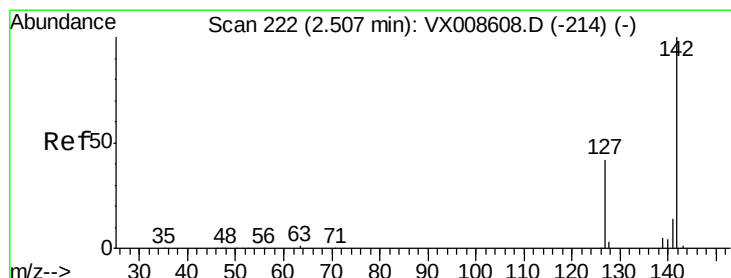
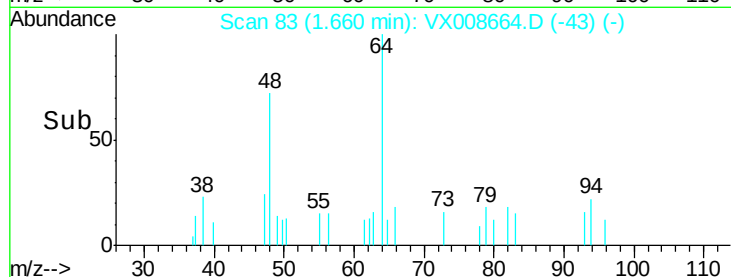
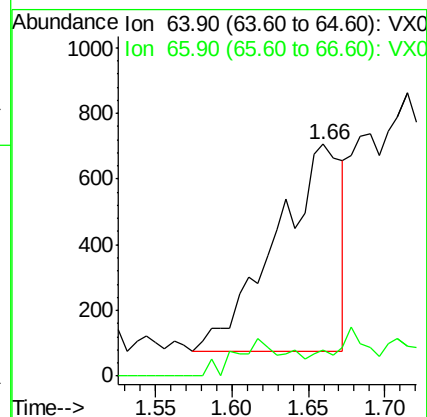
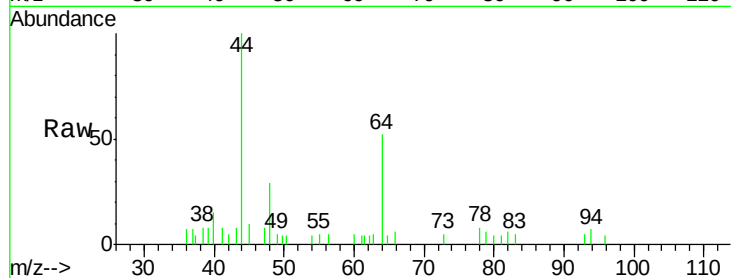
SS037MW042-190403

Tgt Ion: 64 Resp: 1880

Ion Ratio Lower Upper

64 100

66 12.9 25.4 38.0#



#10

Methyl Iodide

Concen: 4.012 ug/l

RT: 2.52 min Scan# 224

Delta R.T. 0.01 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

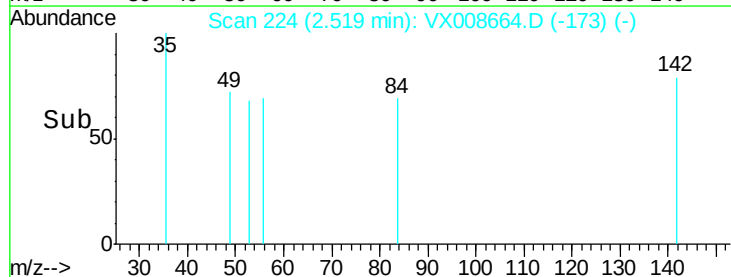
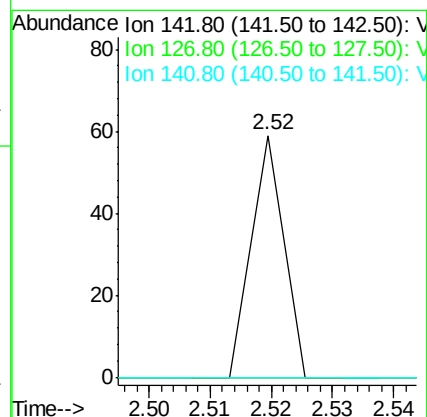
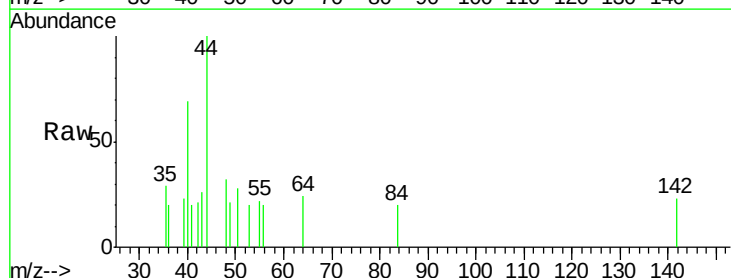
Tgt Ion: 142 Resp: 22

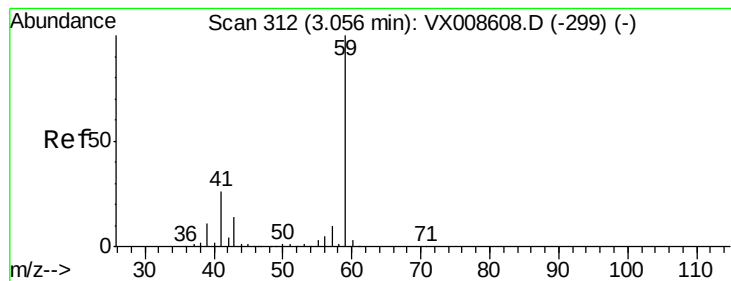
Ion Ratio Lower Upper

142 100

127 0.0 33.0 49.6#

141 0.0 11.4 17.2#





#11

Tert butyl alcohol

Concen: 1.176 ug/l

RT: 3.01 min Scan# 305

Delta R.T. -0.04 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

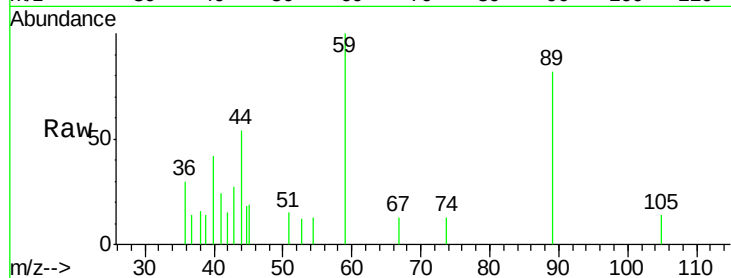
SS037MW042-190403

Tgt Ion: 59 Resp: 865

Ion Ratio Lower Upper

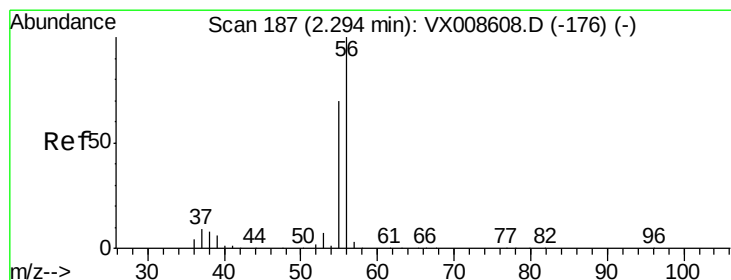
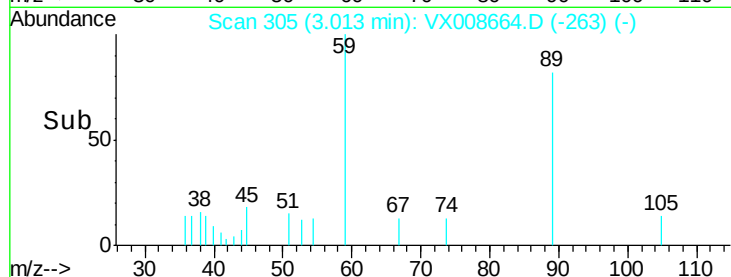
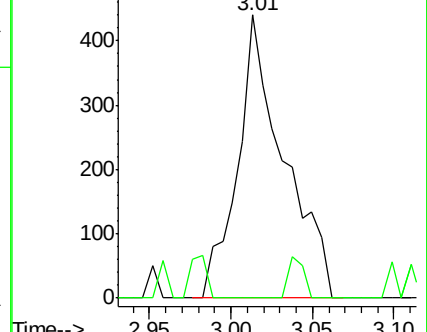
59 100

57 0.0 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0



#13

Acrolein

Concen: 0.291 ug/l

RT: 2.29 min Scan# 187

Delta R.T. -0.00 min

Lab File: VX008664.D

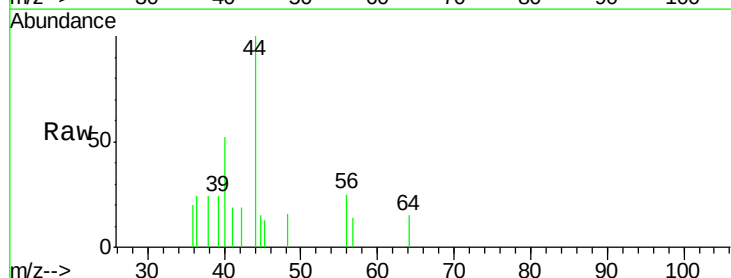
Acq: 05 Apr 2019 02:59

Tgt Ion: 56 Resp: 106

Ion Ratio Lower Upper

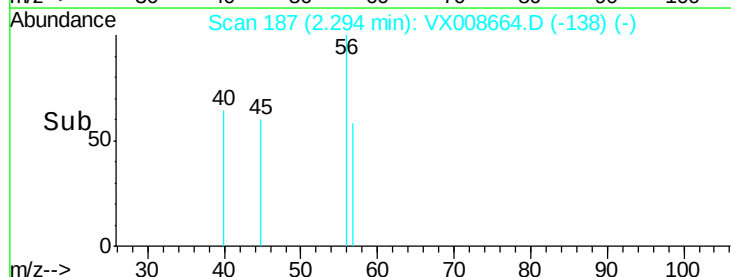
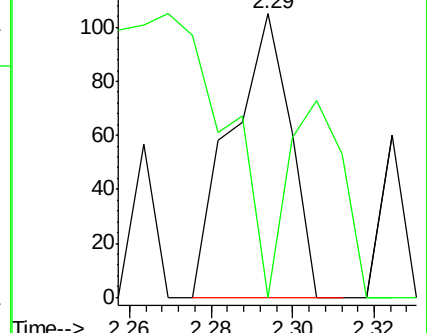
56 100

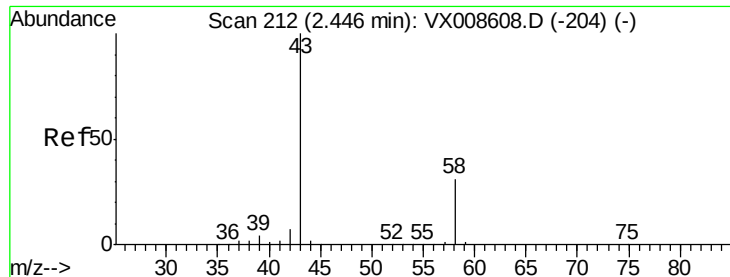
55 64.2 58.0 87.0



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0





#16

Acetone

Concen: 0.994 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

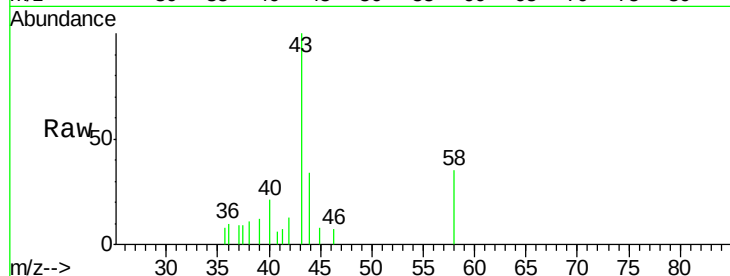
SS037MW042-190403

Tgt Ion: 43 Resp: 1799

Ion Ratio Lower Upper

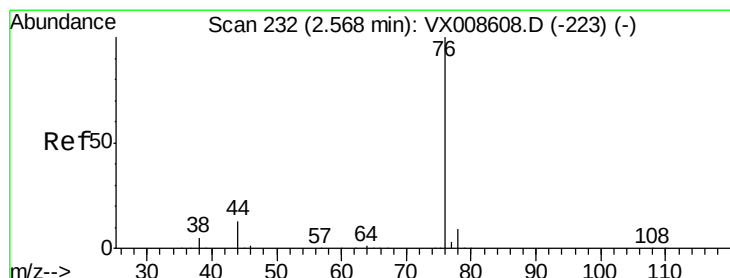
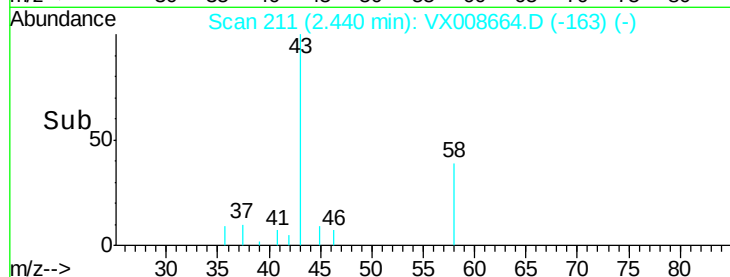
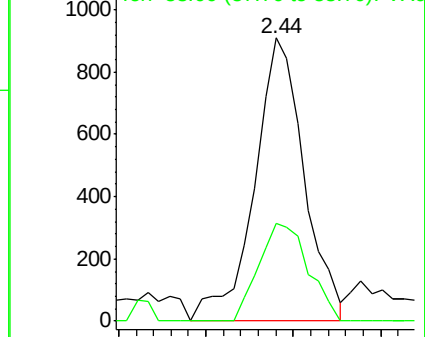
43 100

58 34.5 24.8 37.2



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: VX008664.D

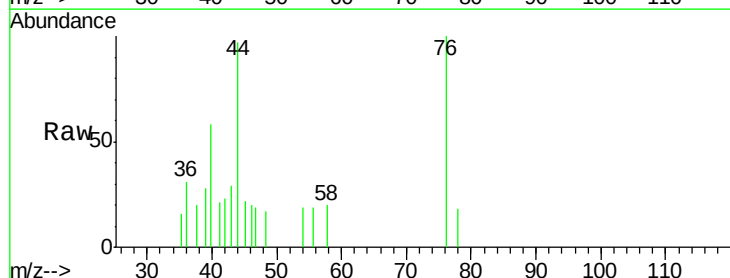
Acq: 05 Apr 2019 02:59

Tgt Ion: 76 Resp: 558

Ion Ratio Lower Upper

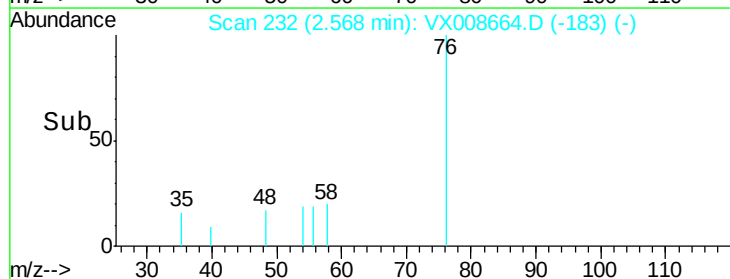
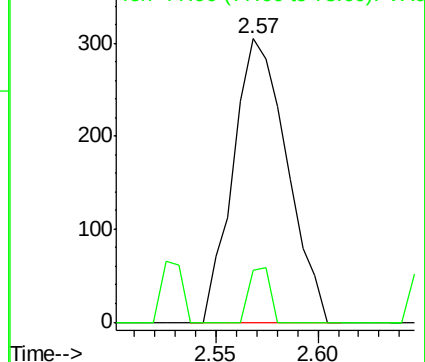
76 100

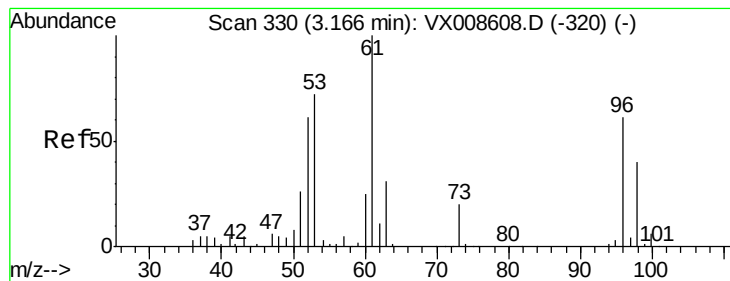
78 18.4 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0





#21

trans-1,2-Dichloroethene

Concen: 0.325 ug/l

RT: 3.17 min Scan# 330

Delta R.T. -0.00 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

SS037MW042-190403

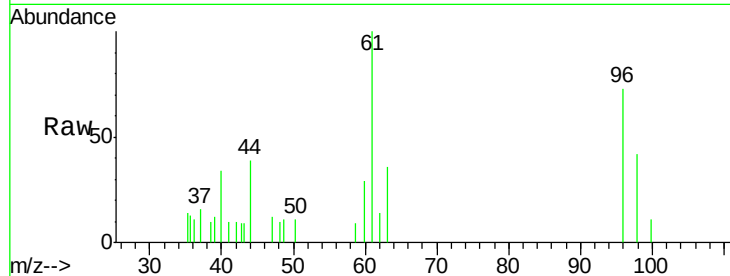
Tgt Ion: 96 Resp: 875

Ion Ratio Lower Upper

96 100

61 137.0 132.1 198.1

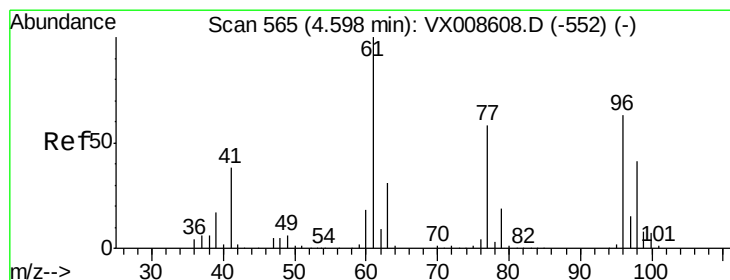
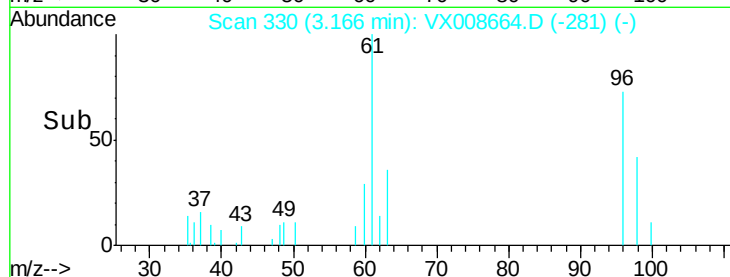
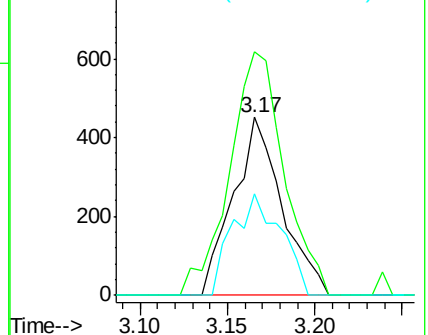
98 57.2 52.2 78.2



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



#27

cis-1,2-Dichloroethene

Concen: 17.277 ug/l

RT: 4.60 min Scan# 565

Delta R.T. -0.00 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

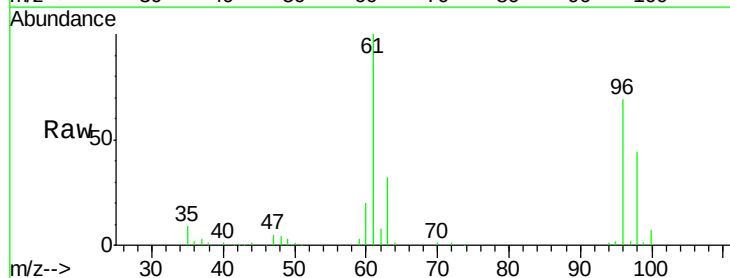
Tgt Ion: 96 Resp: 53495

Ion Ratio Lower Upper

96 100

61 145.3 0.0 327.6

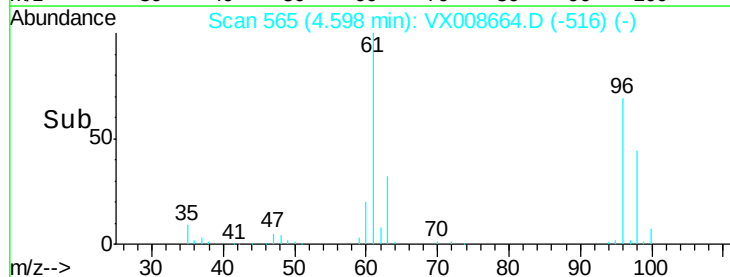
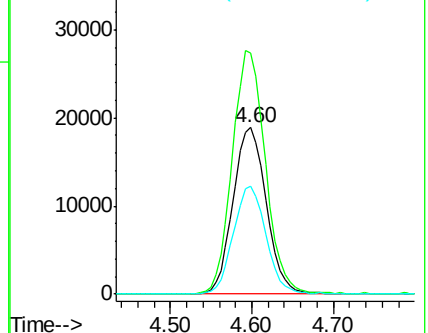
98 63.3 0.0 128.6



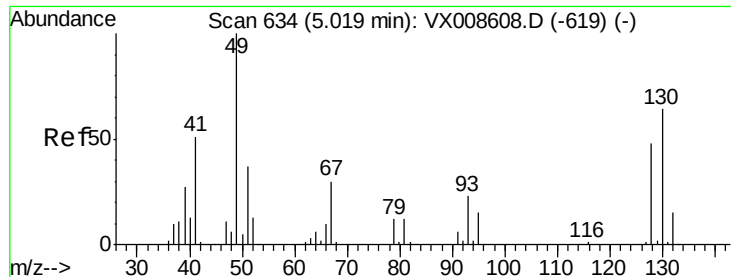
Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0







#28

Bromochloromethane

Concen: Below Cal

RT: 5.02 min Scan# 634

Delta R.T. -0.00 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

SS037MW042-190403

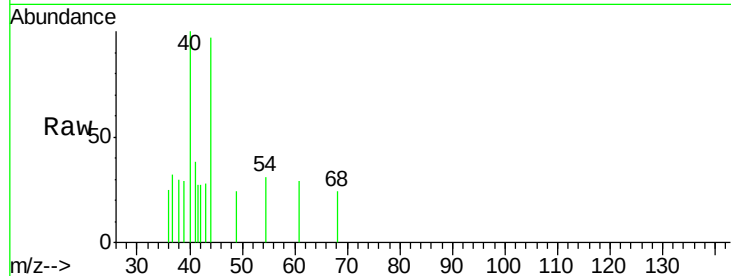
Tgt Ion: 49 Resp: 37

Ion Ratio Lower Upper

49 100

129 0.0 0.0 3.6

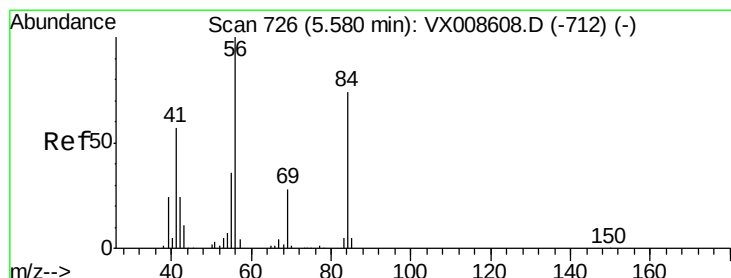
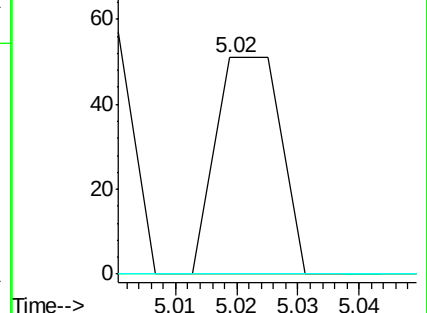
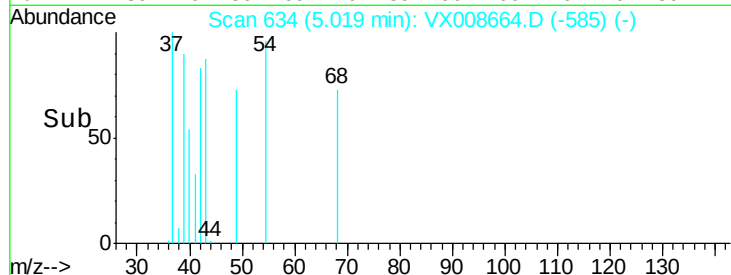
130 0.0 49.3 73.9#



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: 0.936 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.08 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

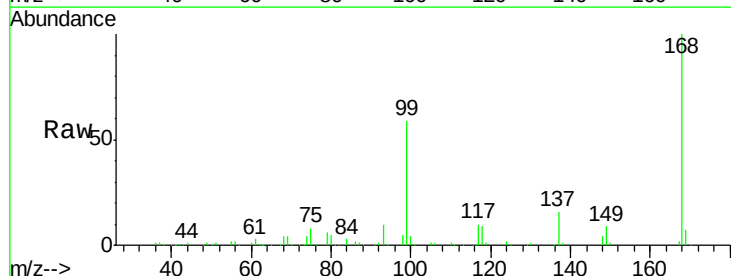
Tgt Ion: 56 Resp: 5078

Ion Ratio Lower Upper

56 100

69 163.8 22.6 33.8#

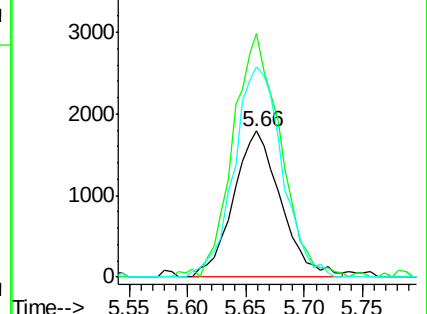
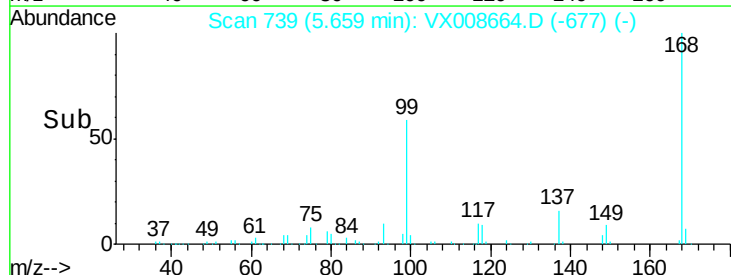
84 144.1 59.3 88.9#

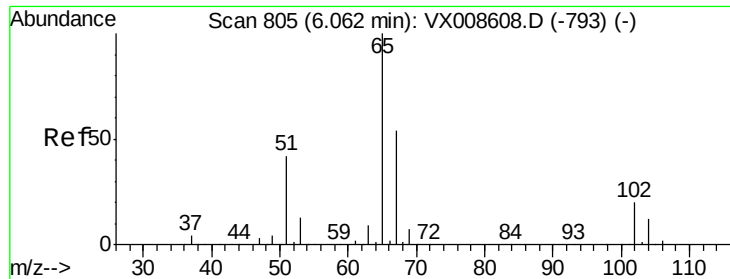


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0

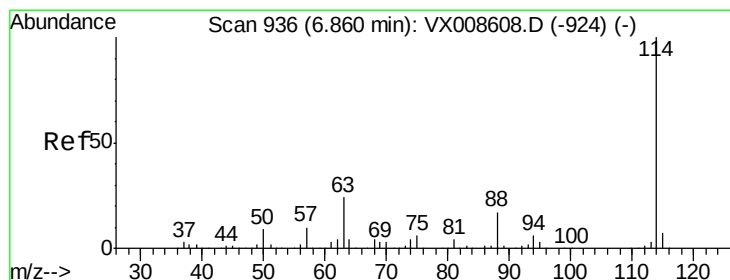
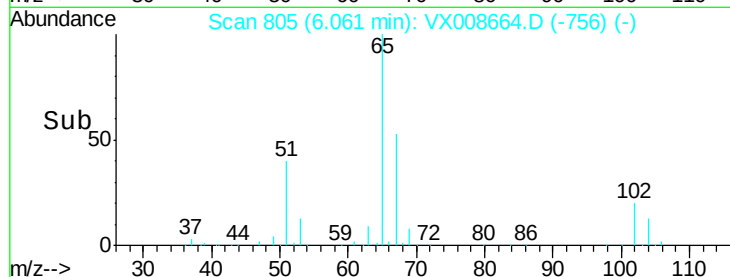
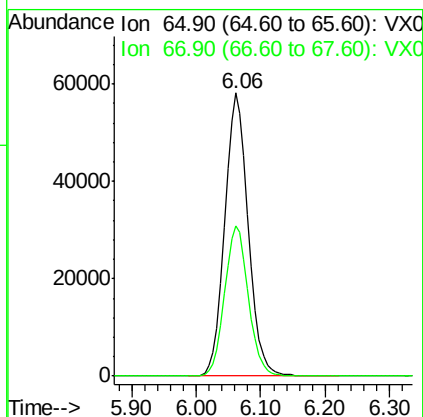
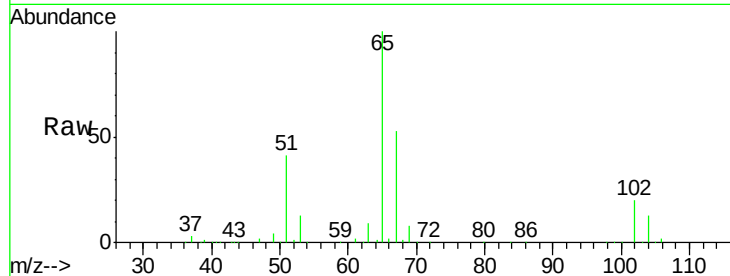




#33  
 1,2-Dichloroethane-d4  
 Concen: 47.644 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. -0.00 min  
 Lab File: VX008664.D  
 Acq: 05 Apr 2019 02:59

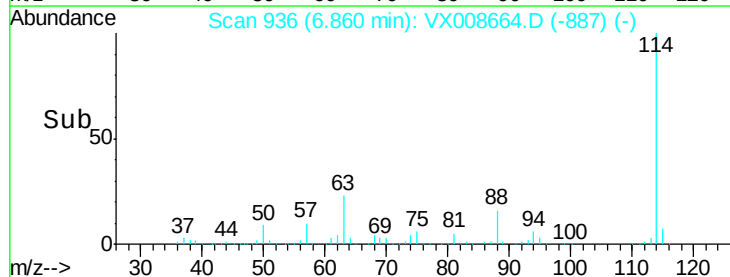
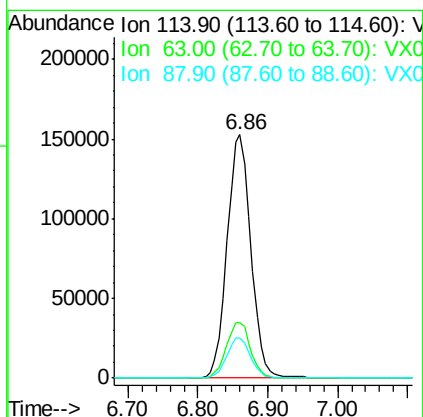
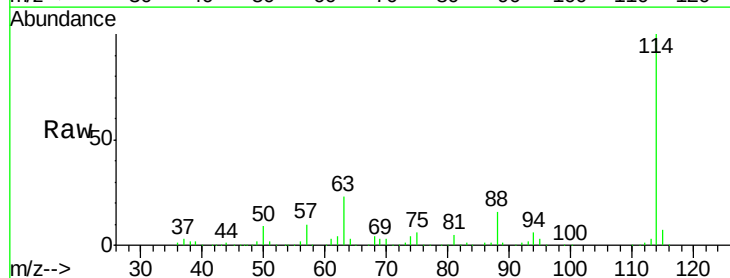
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SS037MW042-190403

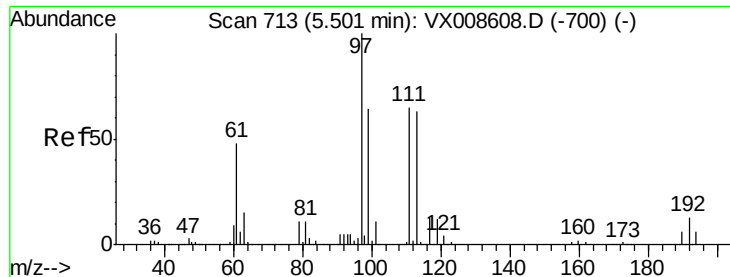
Tgt Ion: 65 Resp: 149661  
 Ion Ratio Lower Upper  
 65 100  
 67 53.9 0.0 107.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. -0.00 min  
 Lab File: VX008664.D  
 Acq: 05 Apr 2019 02:59

Tgt Ion: 114 Resp: 360609  
 Ion Ratio Lower Upper  
 114 100  
 63 23.0 0.0 47.2  
 88 16.5 0.0 34.0





#35

Dibromofluoromethane

Concen: 47.508 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

SS037MW042-190403

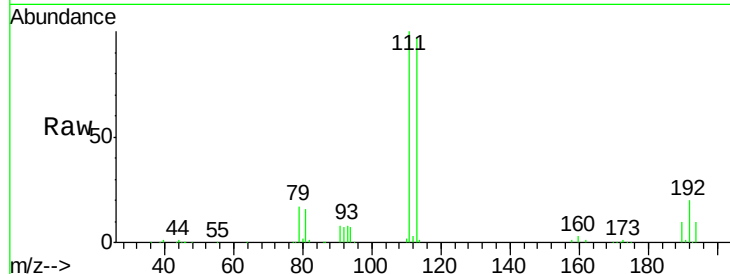
Tgt Ion:113 Resp: 109534

Ion Ratio Lower Upper

113 100

111 102.8 83.4 125.2

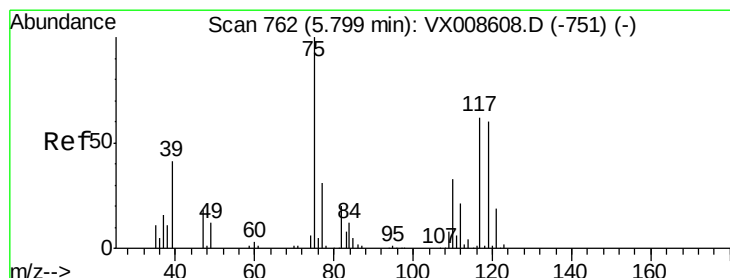
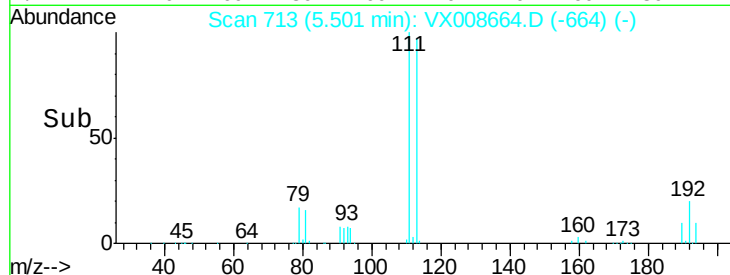
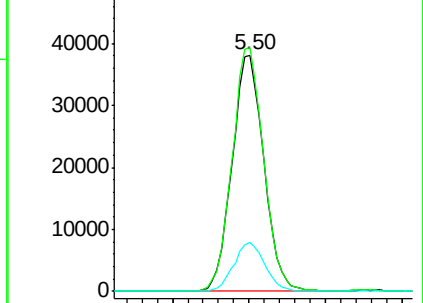
192 20.5 16.1 24.1



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: 4.513 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

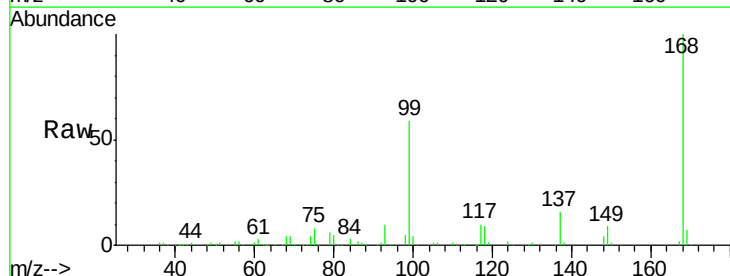
Tgt Ion: 75 Resp: 17791

Ion Ratio Lower Upper

75 100

110 8.1 16.4 49.2#

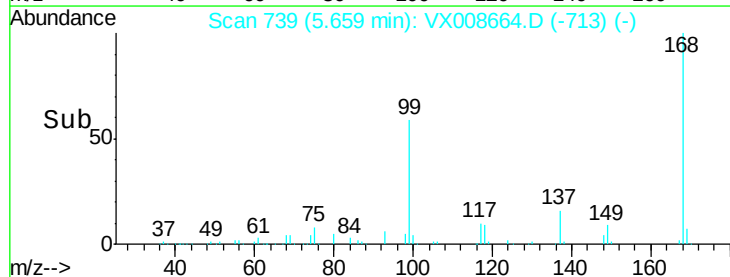
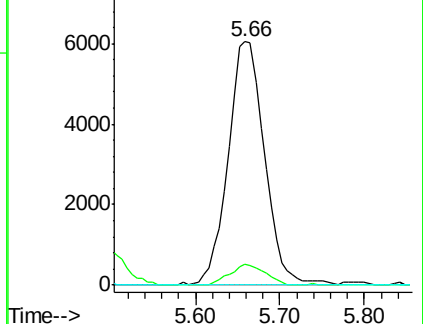
77 0.0 24.7 37.1#

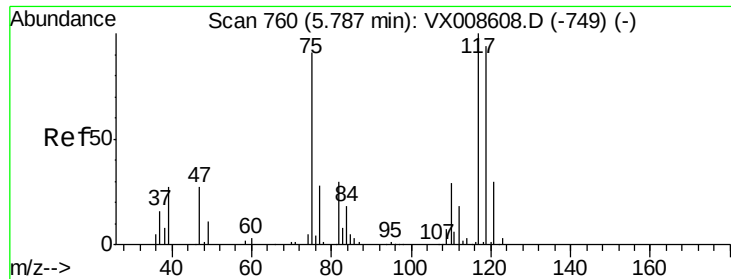


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0

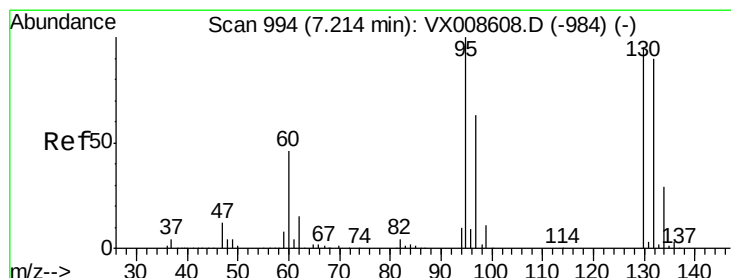
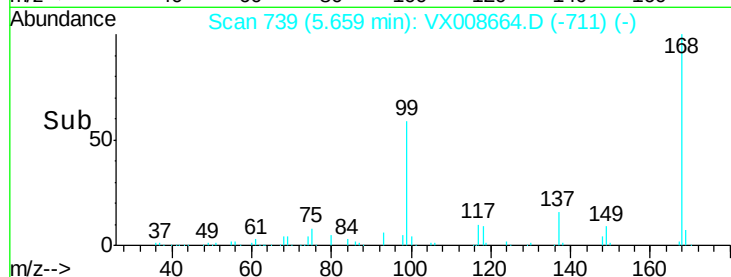
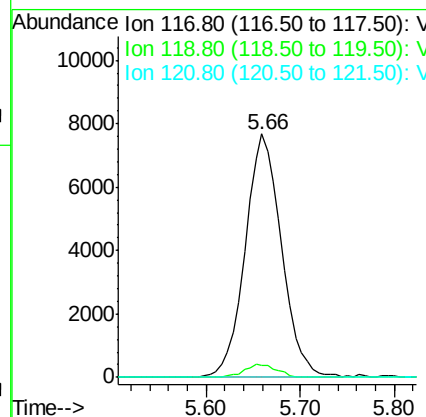
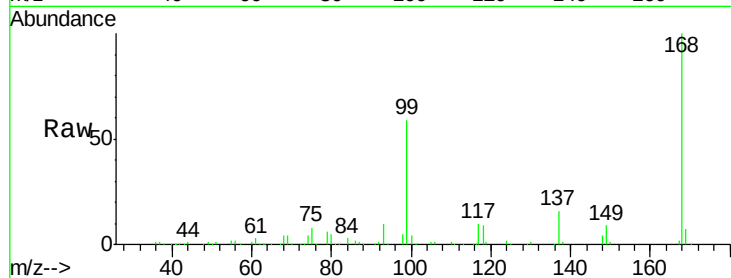




#38  
Carbon Tetrachloride  
Concen: 6.367 ug/l  
RT: 5.66 min Scan# 739  
Delta R.T. -0.13 min  
Lab File: VX008664.D  
Acq: 05 Apr 2019 02:59

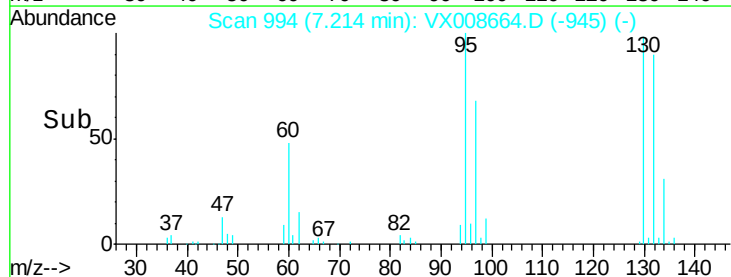
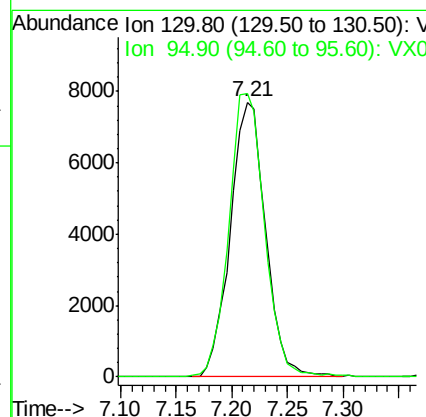
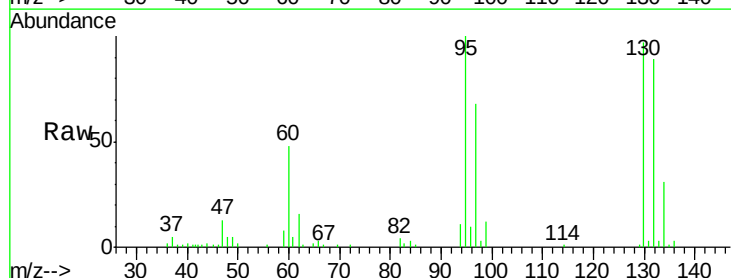
Instrument :  
MSVOA\_X  
ClientSampleId :  
SS037MW042-190403

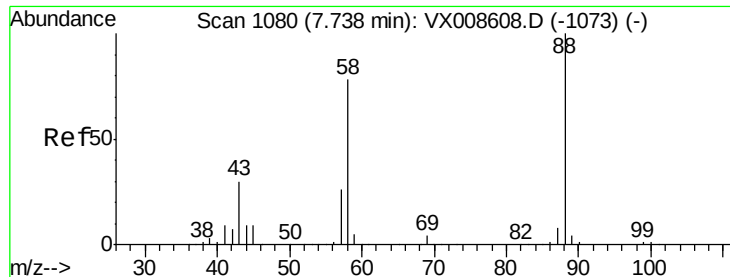
Tgt Ion:117 Resp: 20773  
Ion Ratio Lower Upper  
117 100  
119 5.0 75.0 112.6#  
121 0.0 24.3 36.5#



#44  
Trichloroethene  
Concen: 6.194 ug/l  
RT: 7.21 min Scan# 994  
Delta R.T. -0.00 min  
Lab File: VX008664.D  
Acq: 05 Apr 2019 02:59

Tgt Ion:130 Resp: 16942  
Ion Ratio Lower Upper  
130 100  
95 102.2 0.0 209.8

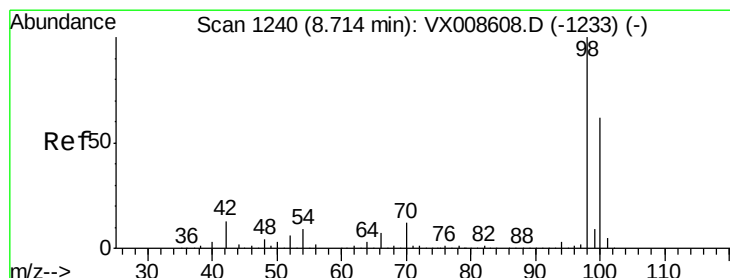
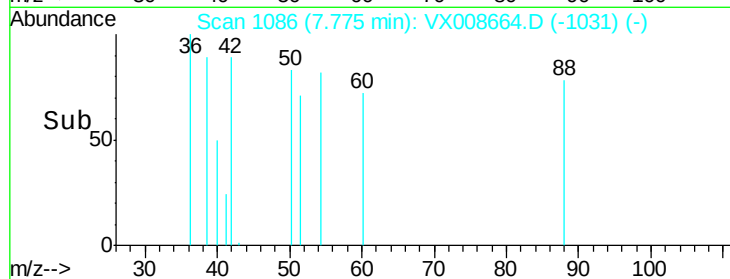
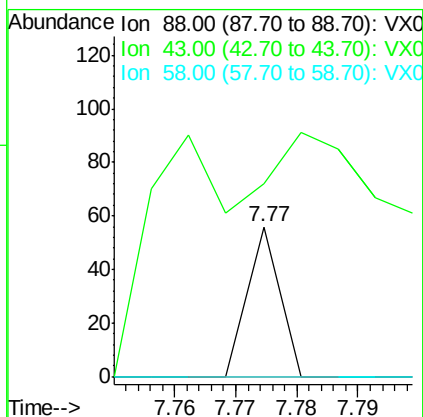
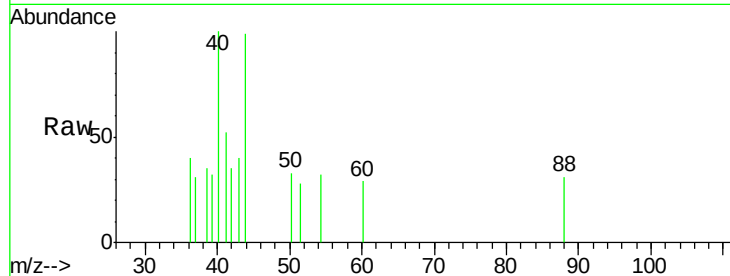




#49  
1,4-Dioxane  
Concen: 0.256 ug/l  
RT: 7.77 min Scan# 1086  
Delta R.T. 0.04 min  
Lab File: VX008664.D  
Acq: 05 Apr 2019 02:59

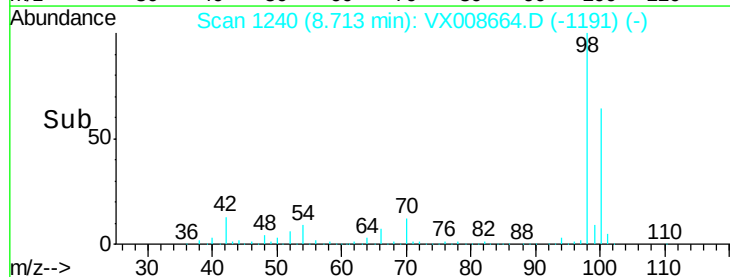
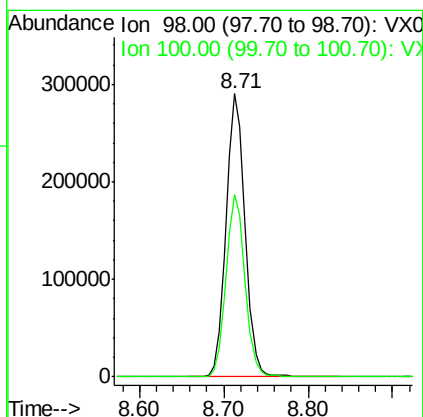
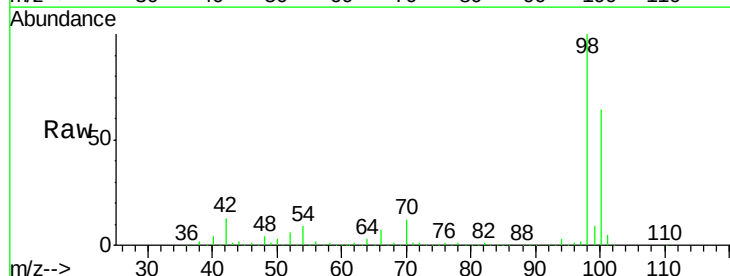
Instrument :  
MSVOA\_X  
ClientSampleId :  
SS037MW042-190403

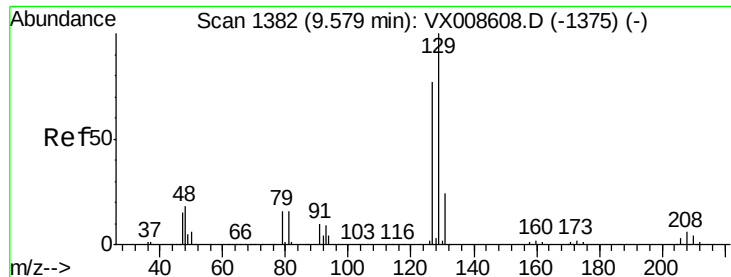
Tgt Ion: 88 Resp: 20  
Ion Ratio Lower Upper  
88 100  
43 125.0 28.6 43.0#  
58 0.0 62.2 93.2#



#50  
Toluene-d8  
Concen: 49.087 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. -0.00 min  
Lab File: VX008664.D  
Acq: 05 Apr 2019 02:59

Tgt Ion: 98 Resp: 450633  
Ion Ratio Lower Upper  
98 100  
100 64.5 51.4 77.0

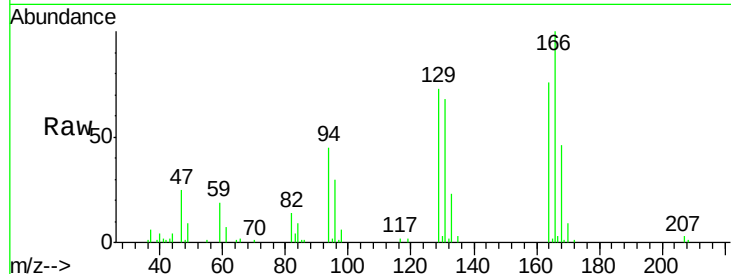




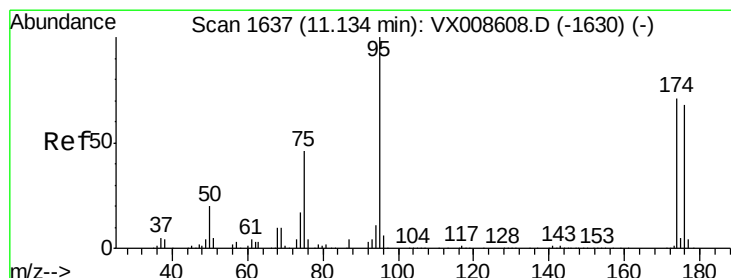
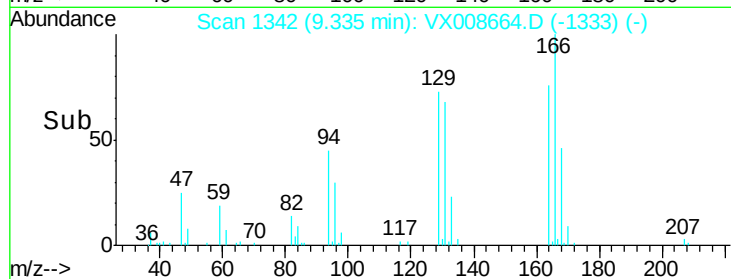
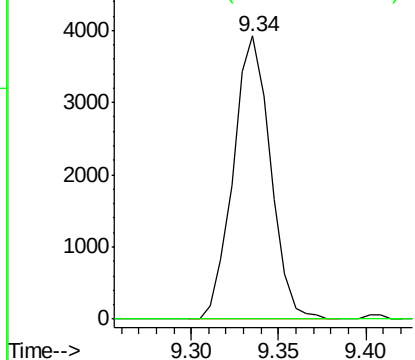
#60  
 Dibromochloromethane  
 Concen: 2.217 ug/l  
 RT: 9.34 min Scan# 1342  
 Delta R.T. -0.24 min  
 Lab File: VX008664.D  
 Acq: 05 Apr 2019 02:59

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SS037MW042-190403

Tgt Ion:129 Resp: 5807  
 Ion Ratio Lower Upper  
 129 100  
 127 0.0 38.5 115.3#

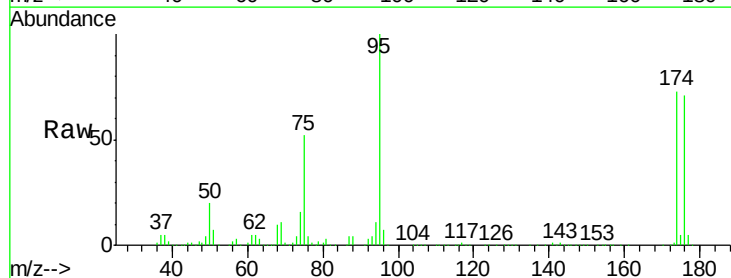


Abundance Ion 128.80 (128.50 to 129.50): V  
 Ion 126.80 (126.50 to 127.50): V

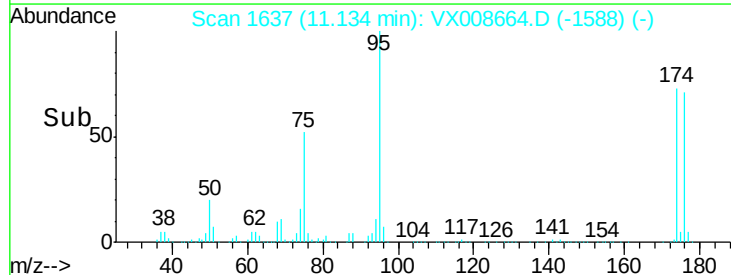
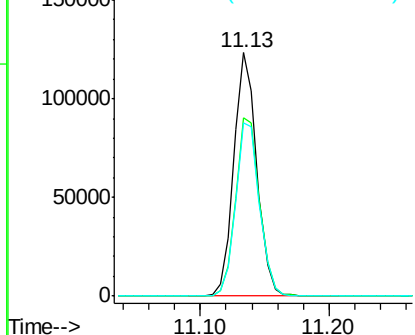


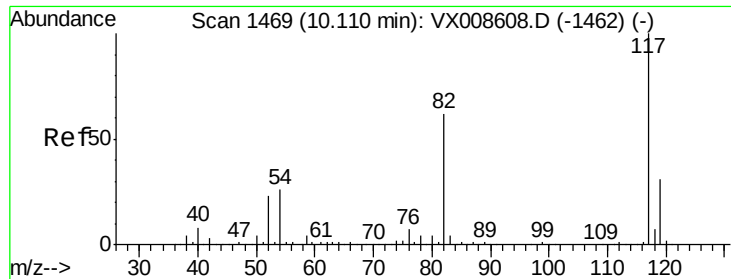
#62  
 4-Bromofluorobenzene  
 Concen: 47.337 ug/l  
 RT: 11.13 min Scan# 1637  
 Delta R.T. -0.00 min  
 Lab File: VX008664.D  
 Acq: 05 Apr 2019 02:59

Tgt Ion: 95 Resp: 154104  
 Ion Ratio Lower Upper  
 95 100  
 174 75.8 0.0 151.8  
 176 73.7 0.0 145.8



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

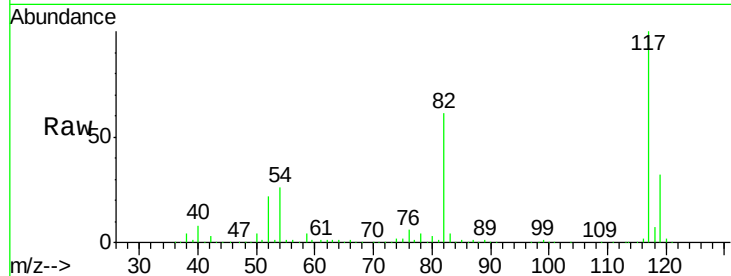




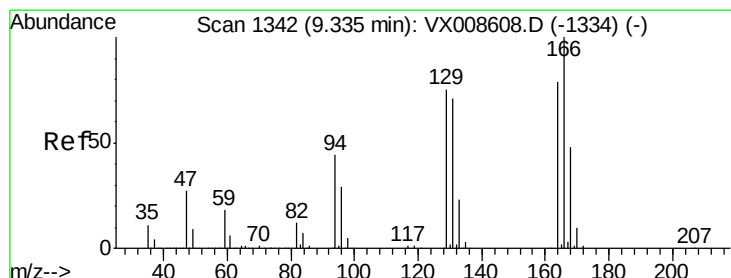
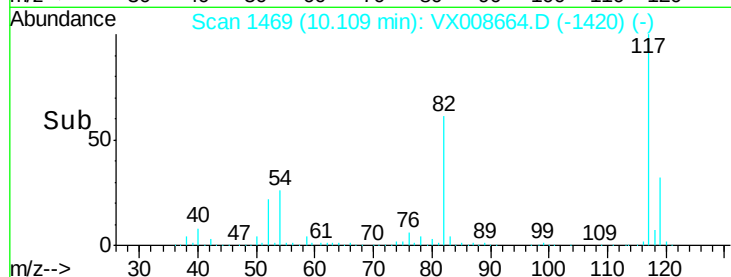
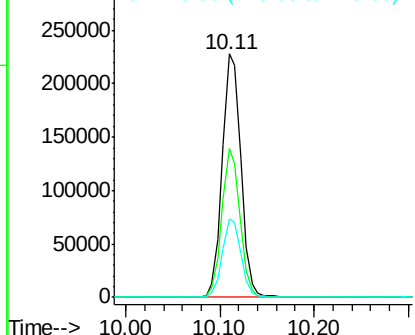
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. -0.00 min  
Lab File: VX008664.D  
Acq: 05 Apr 2019 02:59

Instrument :  
MSVOA\_X  
ClientSampleId :  
SS037MW042-190403

Tgt Ion:117 Resp: 314523  
Ion Ratio Lower Upper  
117 100  
82 61.2 49.6 74.4  
119 32.4 25.0 37.4



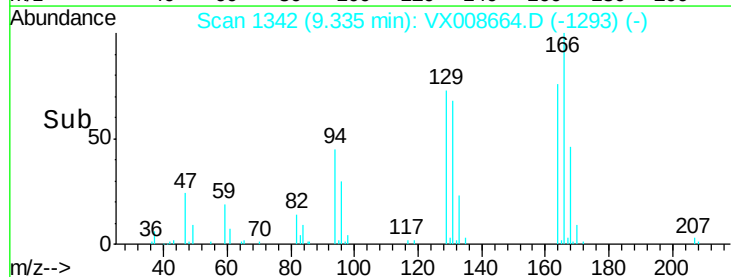
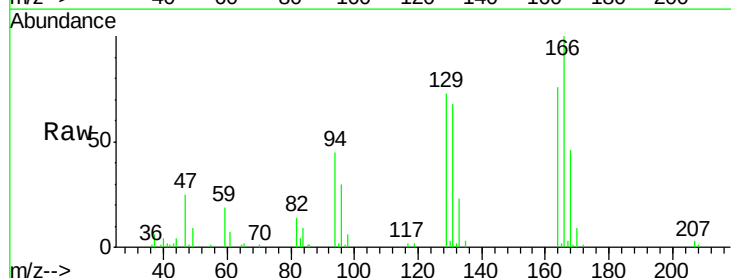
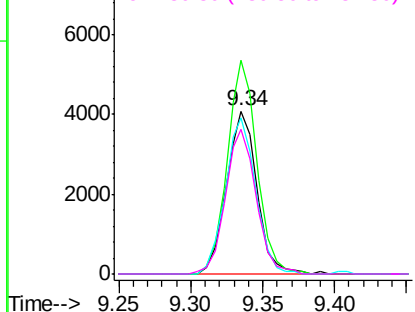
Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

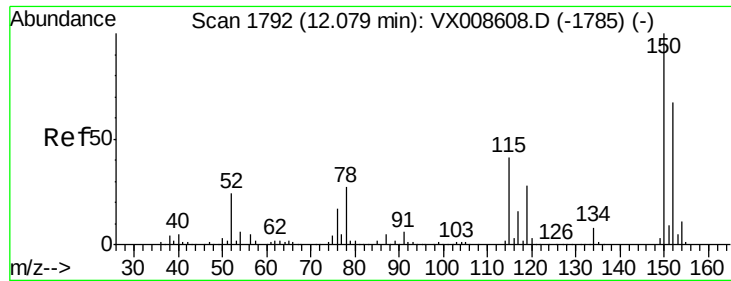


#64  
Tetrachloroethene  
Concen: 2.596 ug/l  
RT: 9.34 min Scan# 1342  
Delta R.T. -0.00 min  
Lab File: VX008664.D  
Acq: 05 Apr 2019 02:59

Tgt Ion:164 Resp: 6050  
Ion Ratio Lower Upper  
164 100  
166 131.0 101.0 151.6  
129 95.9 75.8 113.8  
131 88.8 71.8 107.8

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: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

SS037MW042-190403

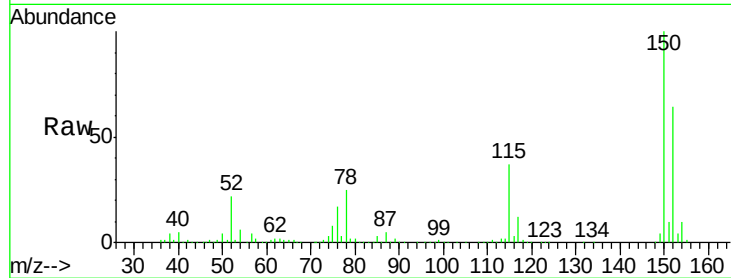
Tgt Ion:152 Resp: 131429

Ion Ratio Lower Upper

152 100

115 60.3 43.5 130.5

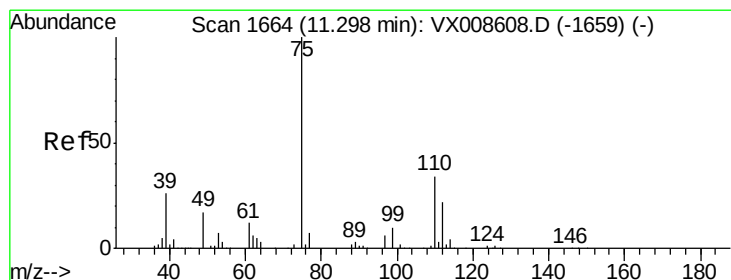
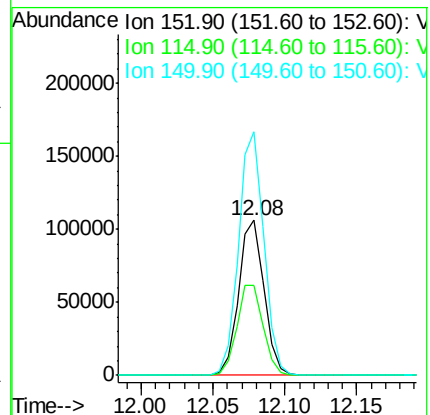
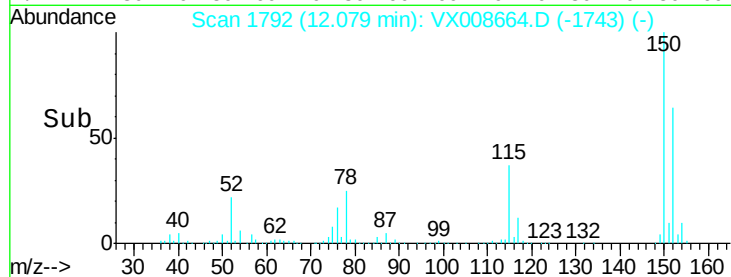
150 156.4 0.0 348.8



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: 21.741 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX008664.D

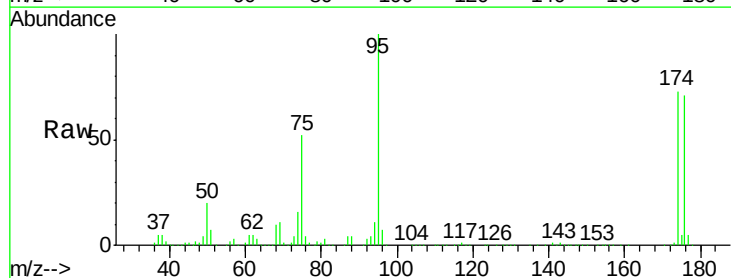
Acq: 05 Apr 2019 02:59

Tgt Ion: 75 Resp: 78494

Ion Ratio Lower Upper

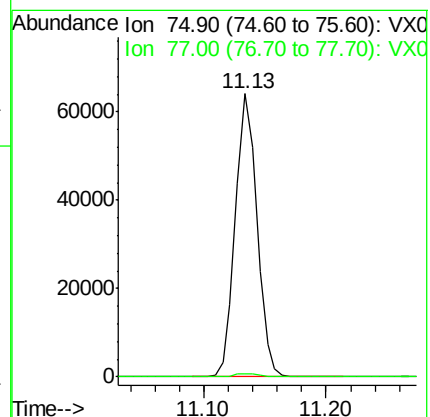
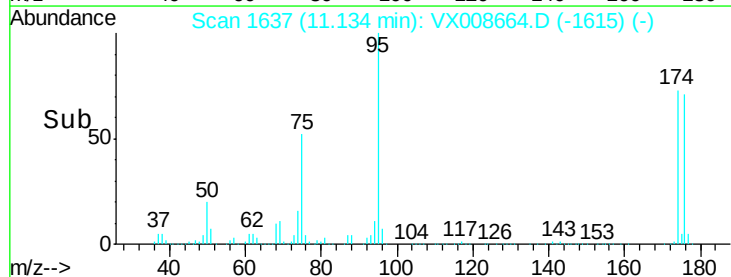
75 100

77 1.3 22.3 66.8#

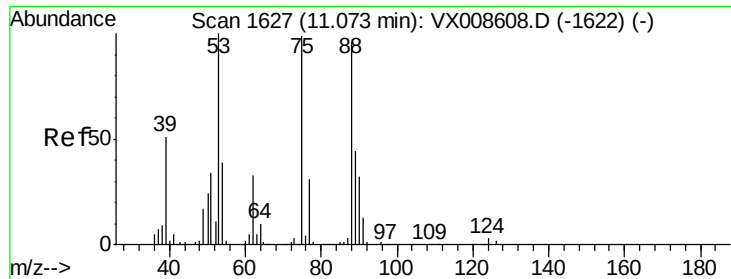


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0







#81

trans-1,4-Dichloro-2-butene

Concen: 59.929 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX008664.D

Acq: 05 Apr 2019 02:59

Instrument :

MSVOA\_X

ClientSampleId :

SS037MW042-190403

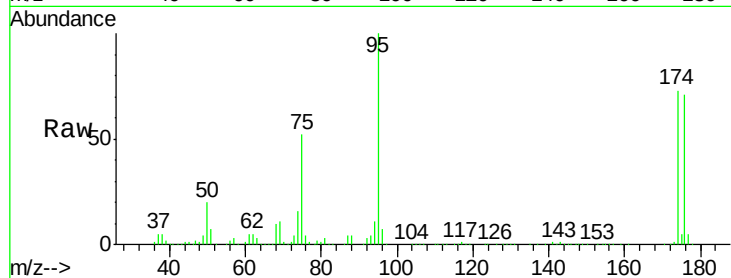
Tgt Ion: 75 Resp: 78494

Ion Ratio Lower Upper

75 100

53 0.0 81.3 121.9#

89 0.0 35.6 53.4#



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

