

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX050319\  
 Data File : VX009333.D  
 Acq On : 04 May 2019 00:27  
 Operator : JC/SP  
 Sample : K2663-03  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SS050MW113-190430

Quant Time: May 04 02:13:25 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 30 07:03:50 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 190089   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 309572   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 269255   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 118973   | 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   | 128612   | 49.56 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.12% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 95973    | 49.32 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.64% |          |
| 50) Toluene-d8              | 8.71  | 98   | 386899   | 49.24 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.48% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 128685   | 45.08 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.16% |          |

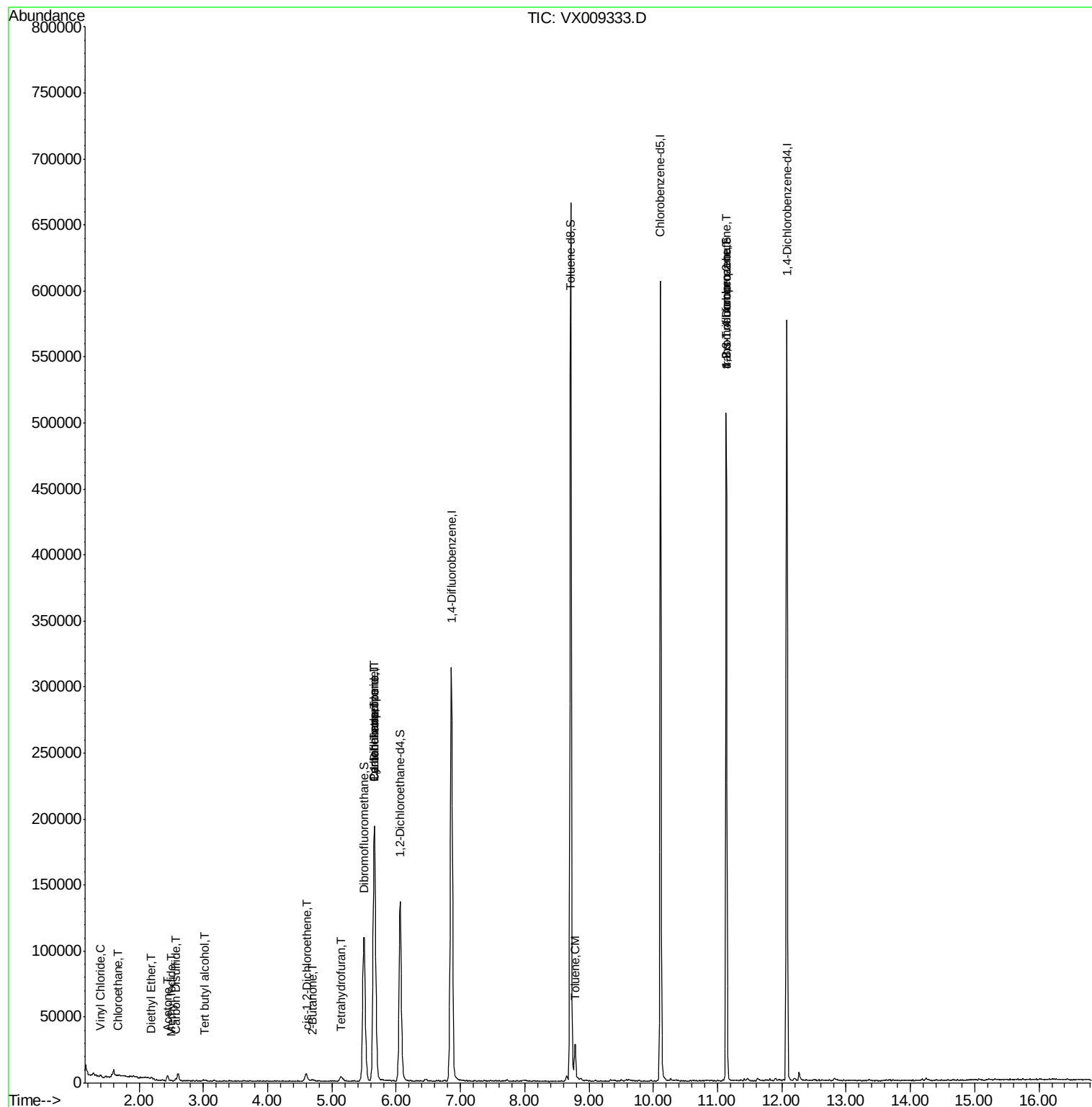
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 4) Vinyl Chloride              | 1.40  | 62   | 848      | 0.364     | ug/l   | 95     |
| 6) Chloroethane                | 1.67  | 64   | 3942     | 2.633     | ug/l # | 72     |
| 8) Diethyl Ether               | 2.19  | 74   | 420      | 0.313     | ug/l   | 80     |
| 10) Methyl Iodide              | 2.51  | 142  | 19       | 4.602     | ug/l # | 42     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 1022     | 1.701     | ug/l # | 78     |
| 16) Acetone                    | 2.45  | 43   | 4674     | 3.354     | ug/l   | 92     |
| 17) Carbon Disulfide           | 2.57  | 76   | 1453     | 0.290     | ug/l   | 98     |
| 25) 2-Butanone                 | 4.69  | 43   | 711      | 0.328     | ug/l # | 59     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 3254     | 1.409     | ug/l   | 92     |
| 28) Bromochloromethane         | 4.99  | 49   | 20       | Below Cal | #      | 20     |
| 29) Tetrahydrofuran            | 5.14  | 42   | 3721     | 2.671     | ug/l   | 95     |
| 31) Cyclohexane                | 5.67  | 56   | 4250     | 1.108     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 14849    | 5.161     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 17846    | 6.827     | ug/l # | 16     |
| 52) Toluene                    | 8.79  | 92   | 8883     | 1.641     | ug/l   | 96     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 65999    | 23.915    | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 65999    | 61.190    | ug/l # | 10     |

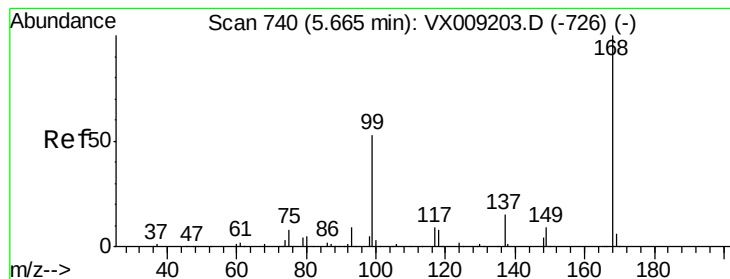
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX050319\  
Data File : VX009333.D  
Acq On : 04 May 2019 00:27  
Operator : JC/SP  
Sample : K2663-03  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 35 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
SS050MW113-190430

Quant Time: May 04 02:13:25 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X042919W.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 30 07:03:50 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.01 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

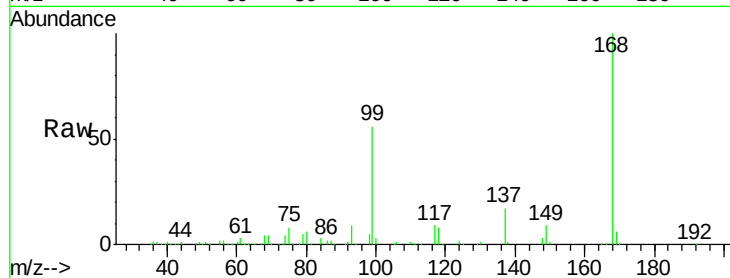
SS050MW113-190430

Tot Ion:168 Resp: 190089

Ion Ratio Lower Upper

168 100

99 55.6 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

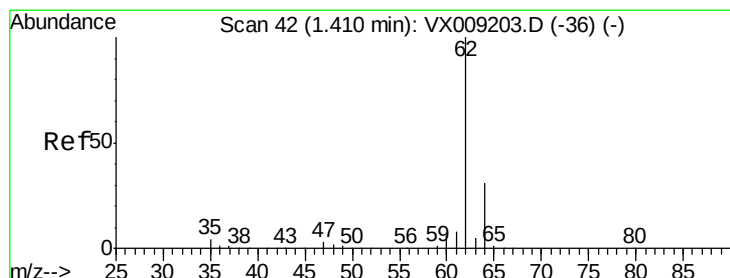
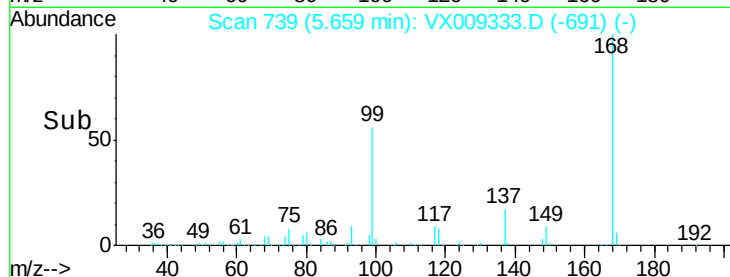
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#4

Vinyl Chloride

Concen: 0.364 ug/l

RT: 1.40 min Scan# 41

Delta R.T. -0.01 min

Lab File: VX009333.D

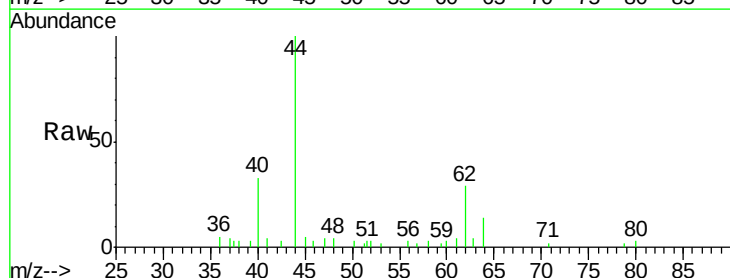
Acq: 04 May 2019 00:27

Tgt Ion: 62 Resp: 848

Ion Ratio Lower Upper

62 100

64 33.2 24.6 36.8



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 63.90 (63.60 to 64.60): VX0

1.40

800

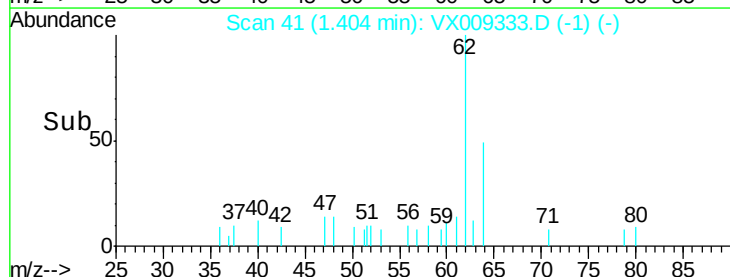
600

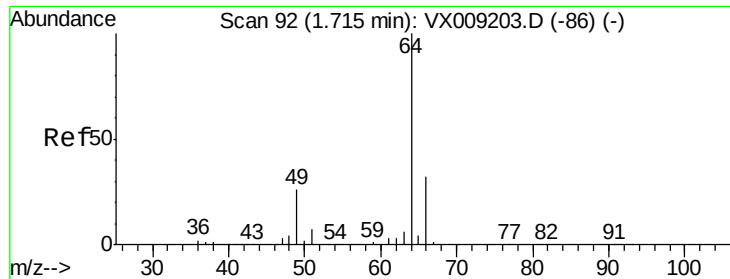
400

200

0

Time--> 1.35 1.40 1.45





#6

Chloroethane

Concen: 2.633 ug/l

RT: 1.67 min Scan# 84

Delta R.T. -0.05 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

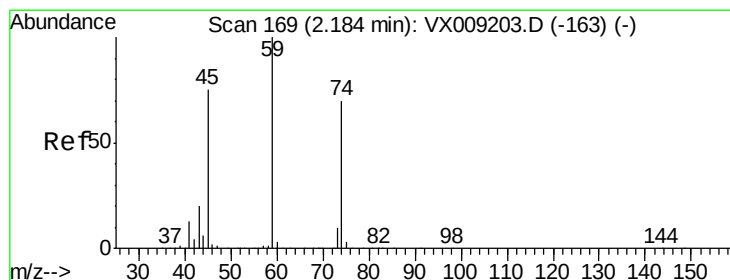
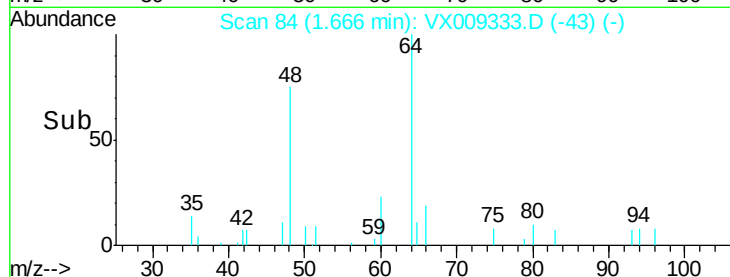
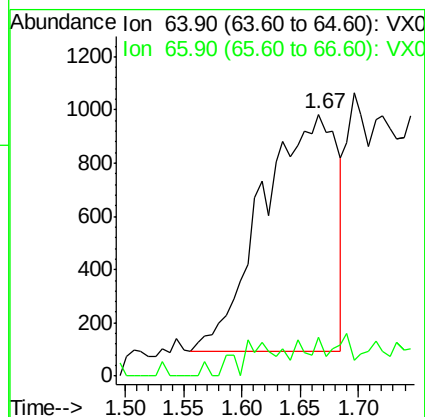
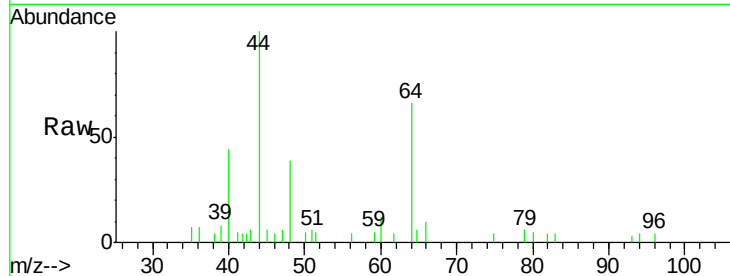
SS050MW113-190430

Tot Ion: 64 Resp: 3942

Ion Ratio Lower Upper

64 100

66 16.2 25.3 37.9#



#8

Diethyl Ether

Concen: 0.313 ug/l

RT: 2.19 min Scan# 170

Delta R.T. 0.01 min

Lab File: VX009333.D

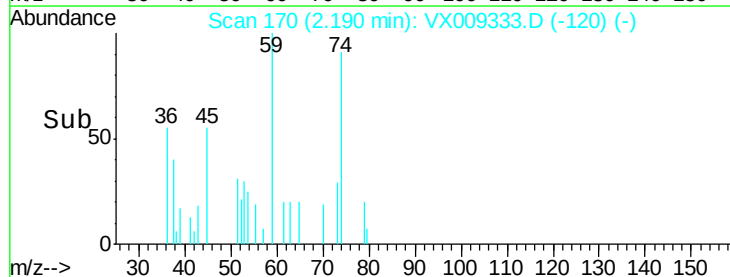
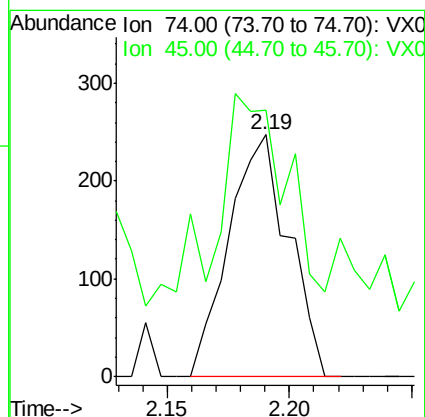
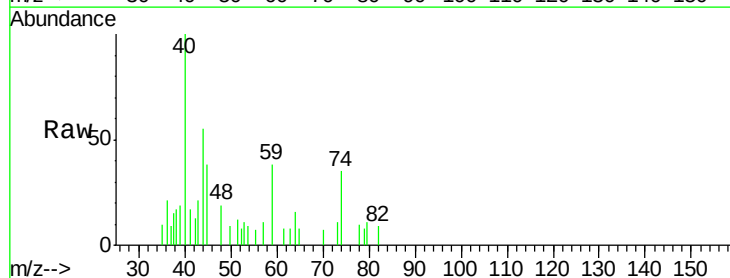
Acq: 04 May 2019 00:27

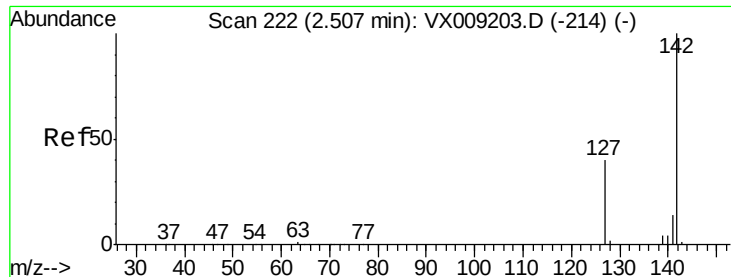
Tgt Ion: 74 Resp: 420

Ion Ratio Lower Upper

74 100

45 86.2 53.3 159.9

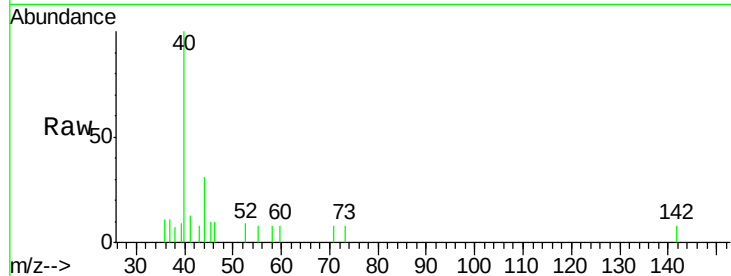




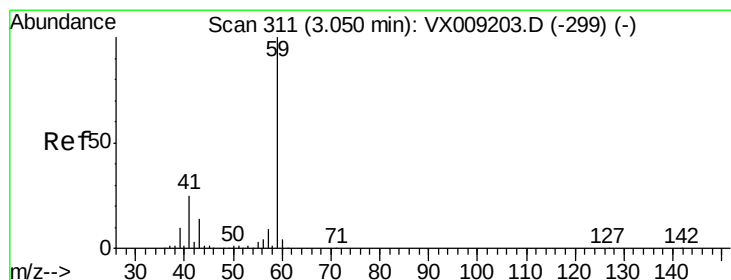
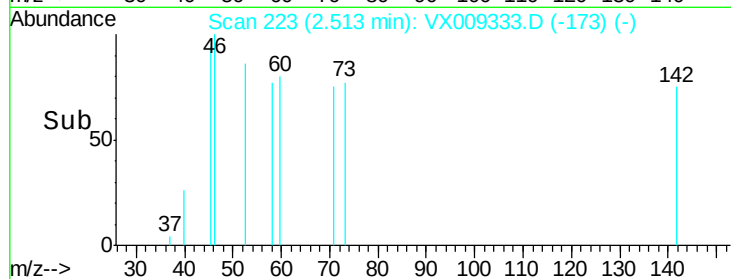
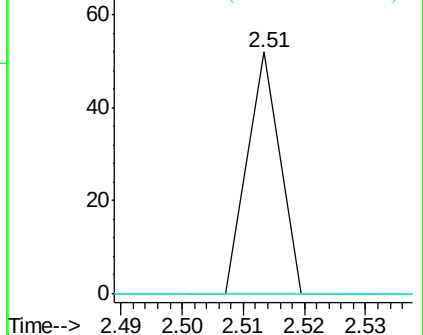
#10  
Methvl Iodide  
Concen: 4.602 ug/l  
RT: 2.51 min Scan# 223  
Delta R.T. 0.01 min  
Lab File: VX009333.D  
Acq: 04 May 2019 00:27

Instrument :  
MSVOA\_X  
ClientSampleId :  
SS050MW113-190430

Tot Ion:142 Resp: 19  
Ion Ratio Lower Upper  
142 100  
127 0.0 32.7 49.1#  
141 0.0 11.5 17.3#

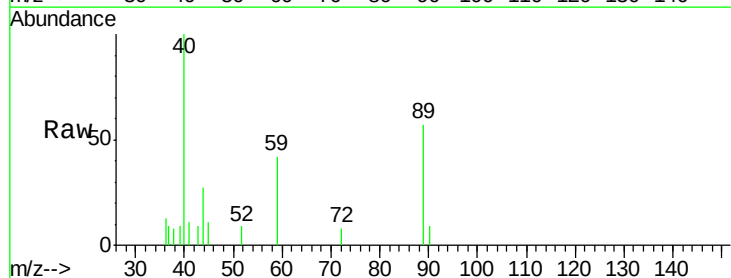


Abundance Ion 141.80 (141.50 to 142.50): V  
Ion 126.80 (126.50 to 127.50): V  
Ion 140.80 (140.50 to 141.50): V

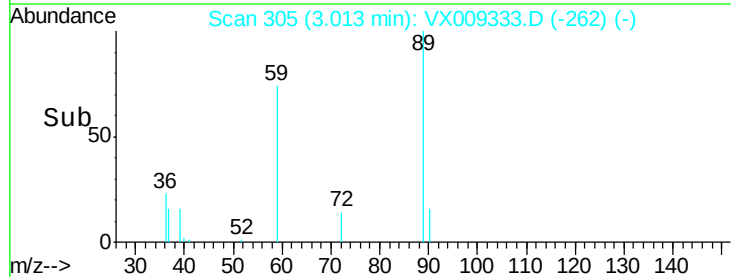
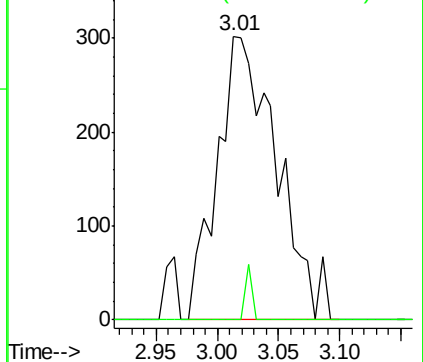


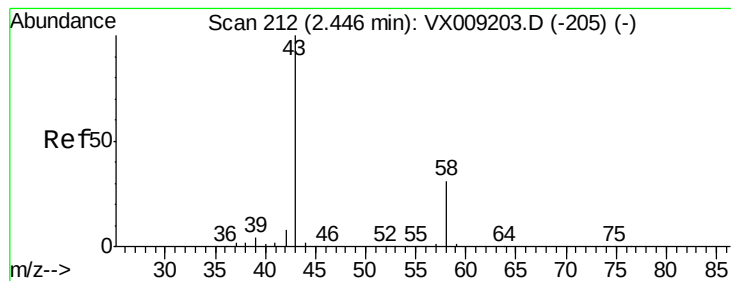
#11  
Tert butyl alcohol  
Concen: 1.701 ug/l  
RT: 3.01 min Scan# 305  
Delta R.T. -0.04 min  
Lab File: VX009333.D  
Acq: 04 May 2019 00:27

Tgt Ion: 59 Resp: 1022  
Ion Ratio Lower Upper  
59 100  
57 2.2 8.2 12.2#



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





#16

Acetone

Concen: 3.354 ug/l

RT: 2.45 min Scan# 212

Delta R.T. -0.00 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

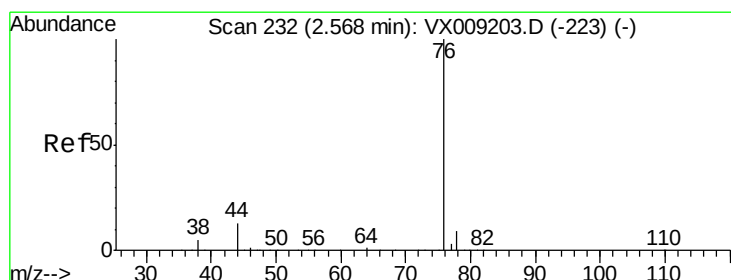
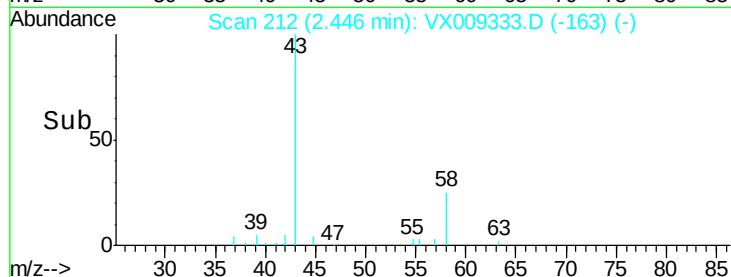
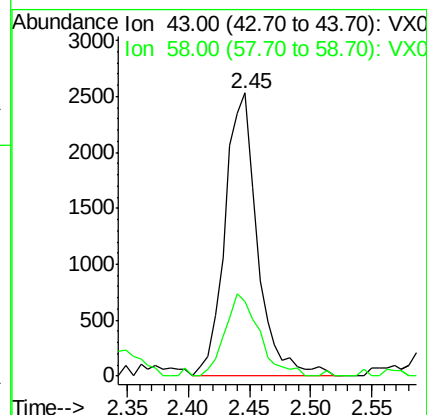
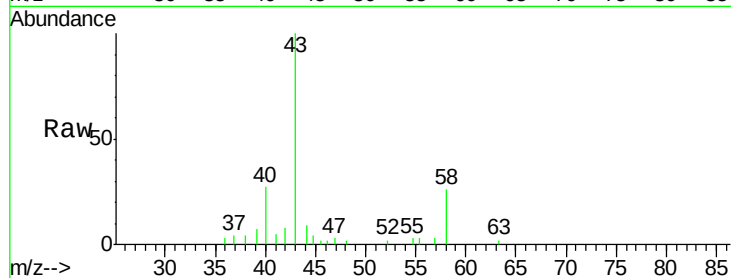
SS050MW113-190430

Tot Ion: 43 Resp: 4674

Ion Ratio Lower Upper

43 100

58 26.4 24.9 37.3



#17

Carbon Disulfide

Concen: 0.290 ug/l

RT: 2.57 min Scan# 232

Delta R.T. -0.00 min

Lab File: VX009333.D

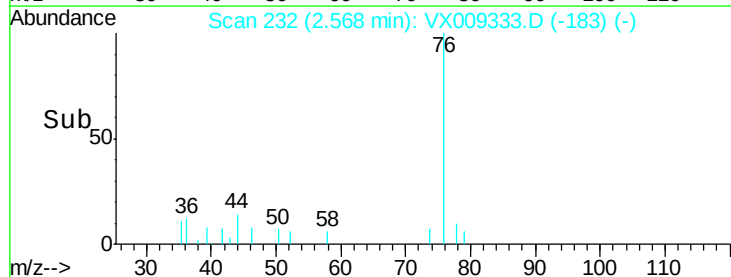
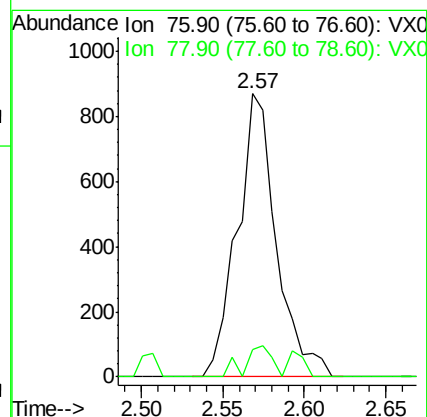
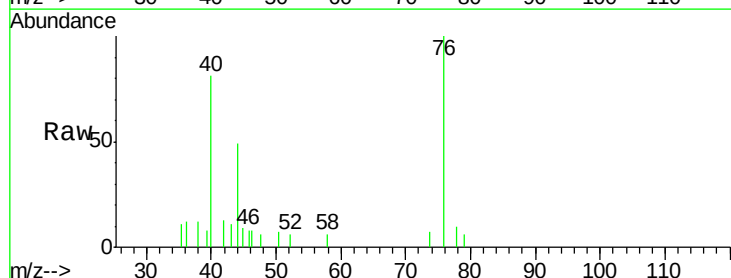
Acq: 04 May 2019 00:27

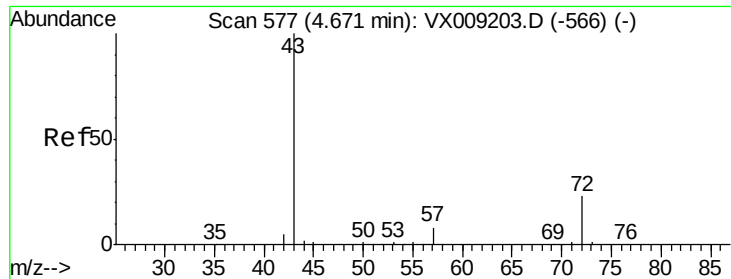
Tgt Ion: 76 Resp: 1453

Ion Ratio Lower Upper

76 100

78 9.9 7.4 11.0





#25

2-Butanone

Concen: 0.328 ug/l

RT: 4.69 min Scan# 580

Delta R.T. 0.02 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

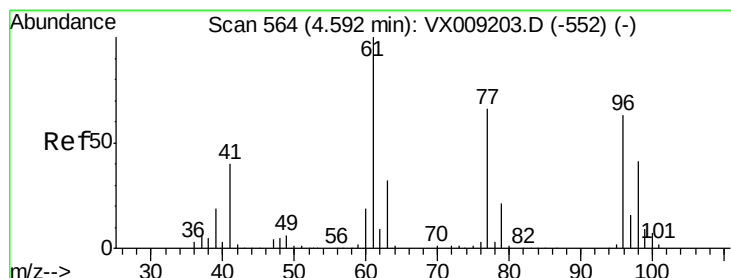
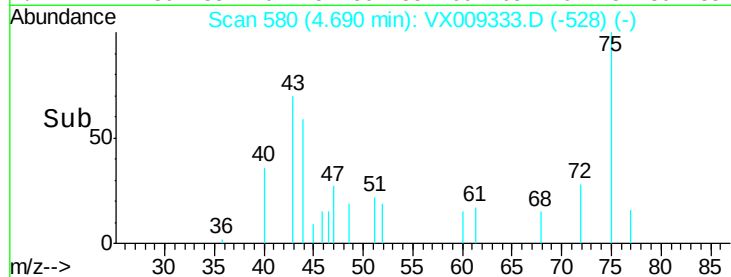
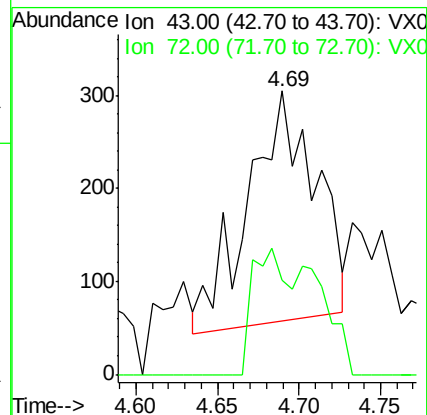
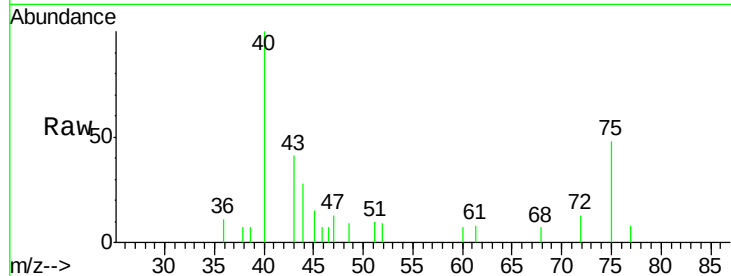
SS050MW113-190430

Tot Ion: 43 Resp: 711

Ion Ratio Lower Upper

43 100

72 42.4 18.2 27.2#



#27

cis-1,2-Dichloroethene

Concen: 1.409 ug/l

RT: 4.60 min Scan# 565

Delta R.T. 0.01 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

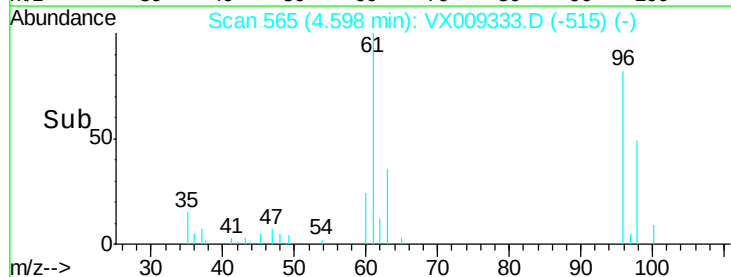
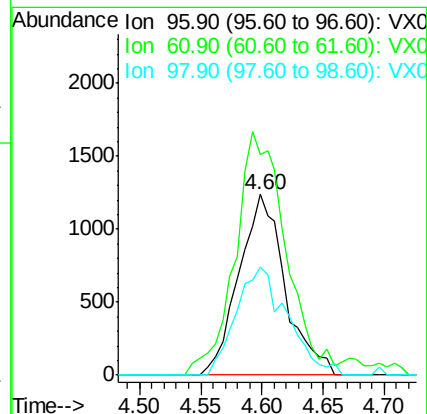
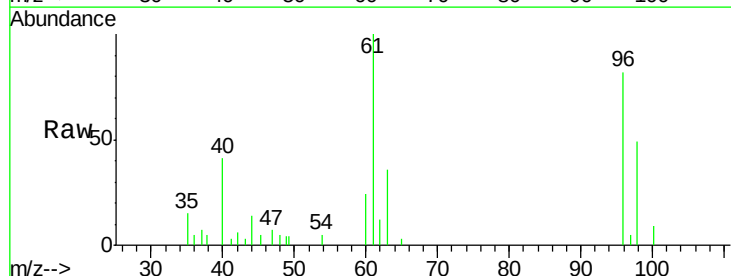
Tgt Ion: 96 Resp: 3254

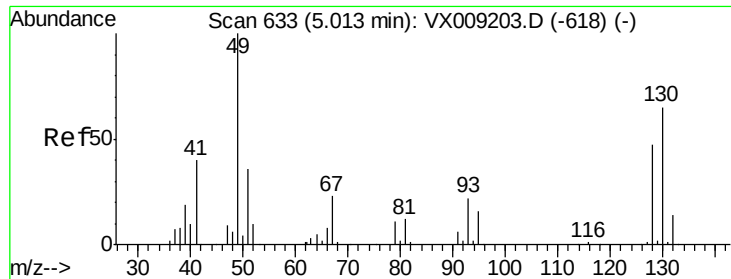
Ion Ratio Lower Upper

96 100

61 148.2 0.0 324.0

98 66.1 0.0 130.4





#28

Bromochloromethane

Concen: Below Cal

RT: 4.99 min Scan# 629

Delta R.T. -0.02 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

SS050MW113-190430

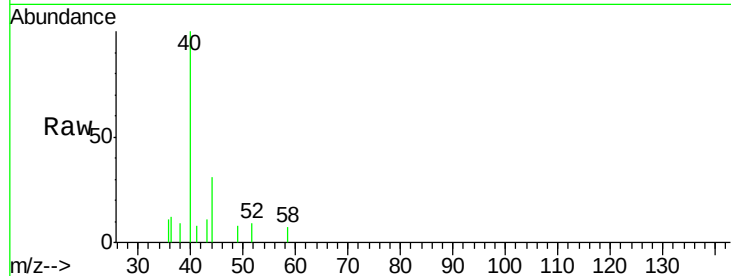
Tot Ion: 49 Resp: 20

Ion Ratio Lower Upper

49 100

129 0.0 0.0 3.8

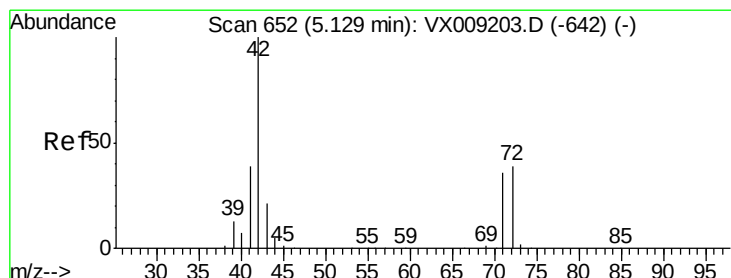
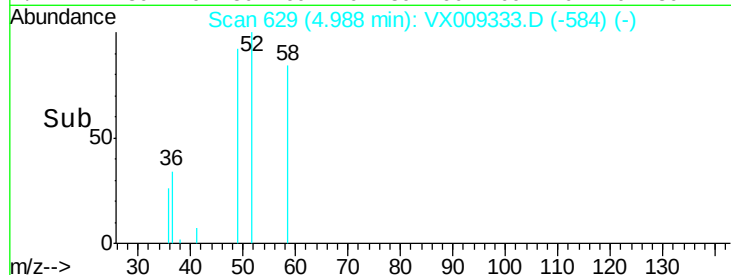
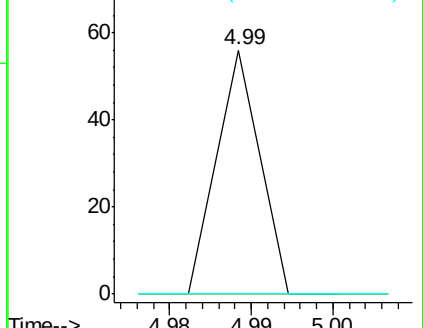
130 0.0 51.2 76.8#



Abundance Ion 48.90 (48.60 to 49.60): VX0

Ion 128.80 (128.50 to 129.50): V

Ion 129.80 (129.50 to 130.50): V



#29

Tetrahydrofuran

Concen: 2.671 ug/l

RT: 5.14 min Scan# 654

Delta R.T. 0.01 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

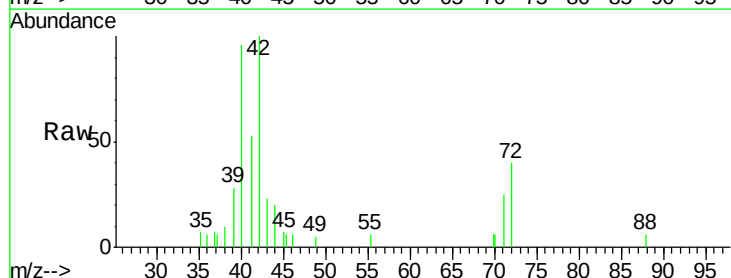
Tgt Ion: 42 Resp: 3721

Ion Ratio Lower Upper

42 100

72 41.8 30.4 45.6

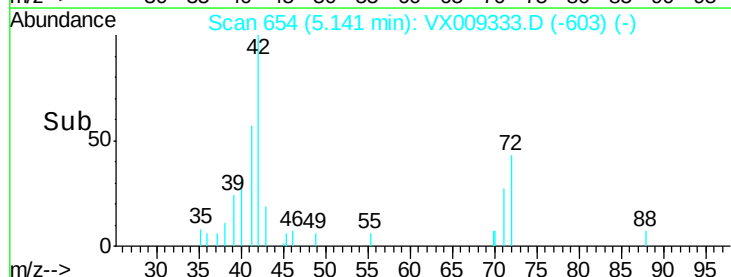
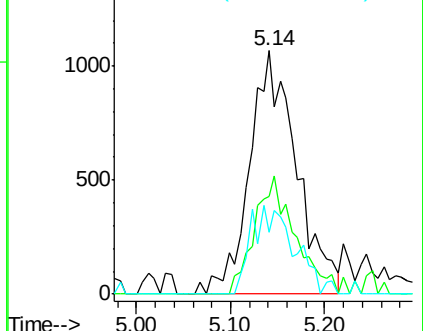
71 33.6 28.6 43.0



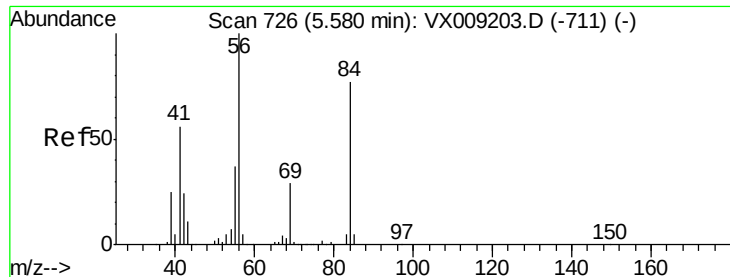
Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



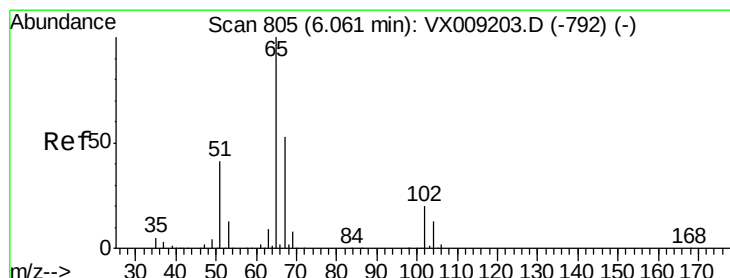
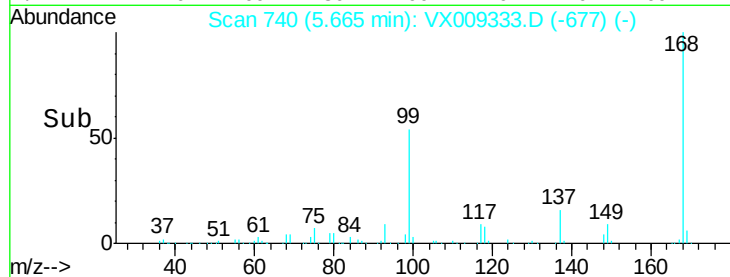
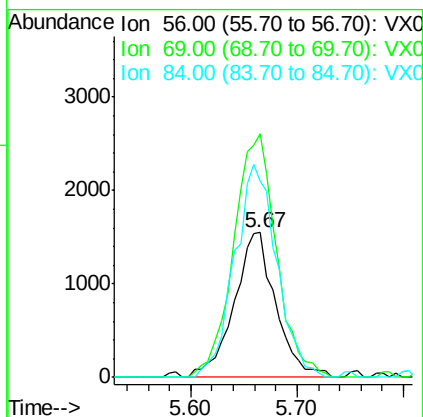
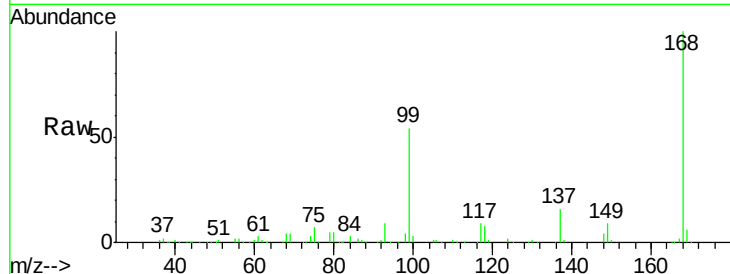




#31  
Cyclohexane  
Concen: 1.108 ug/l  
RT: 5.67 min Scan# 740  
Delta R.T. 0.09 min  
Lab File: VX009333.D  
Acq: 04 May 2019 00:27

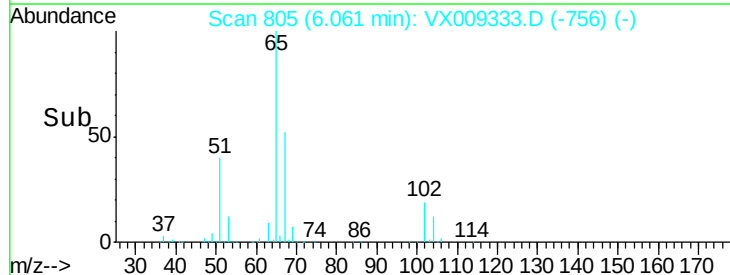
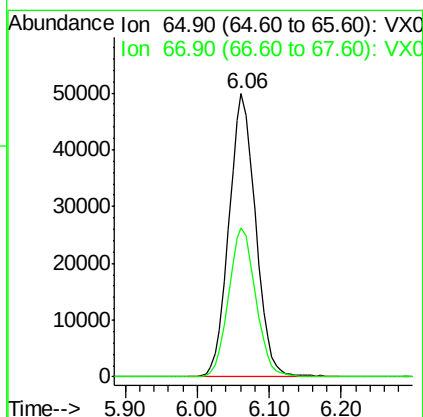
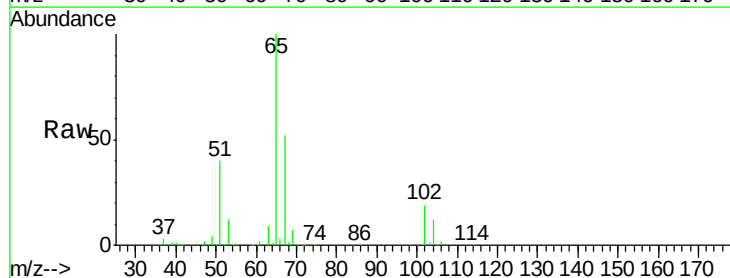
Instrument :  
MSVOA\_X  
ClientSampleId :  
SS050MW113-190430

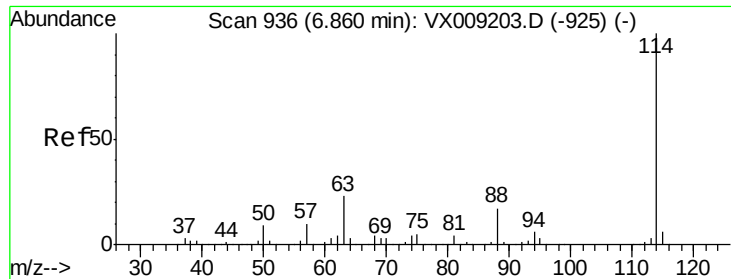
Tot Ion: 56 Resp: 4250  
Ion Ratio Lower Upper  
56 100  
69 168.6 23.4 35.0#  
84 135.4 61.9 92.9#



#33  
1,2-Dichloroethane-d4  
Concen: 49.563 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. -0.00 min  
Lab File: VX009333.D  
Acq: 04 May 2019 00:27

Tgt Ion: 65 Resp: 128612  
Ion Ratio Lower Upper  
65 100  
67 53.4 0.0 106.6

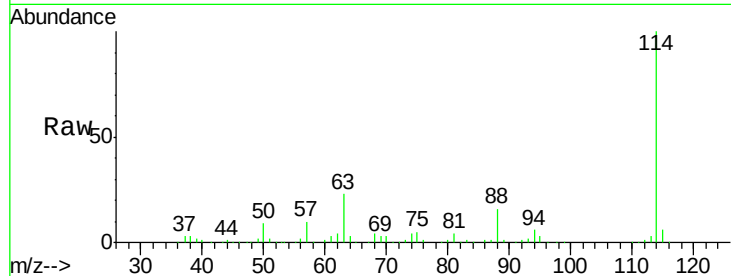




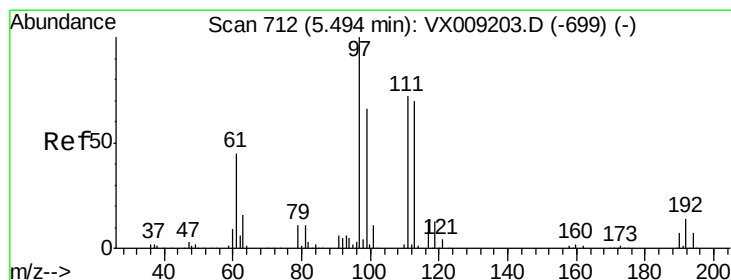
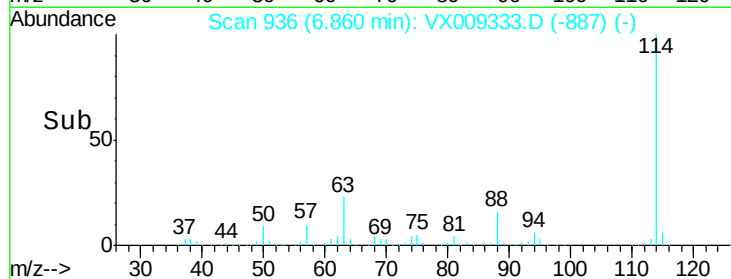
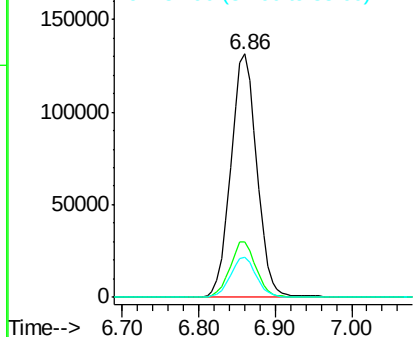
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.86 min Scan# 936  
 Delta R.T. 0.00 min  
 Lab File: VX009333.D  
 Acq: 04 May 2019 00:27

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SS050MW113-190430

Tot Ion:114 Resp: 309572  
 Ion Ratio Lower Upper  
 114 100  
 63 23.0 0.0 45.6  
 88 16.4 0.0 33.2

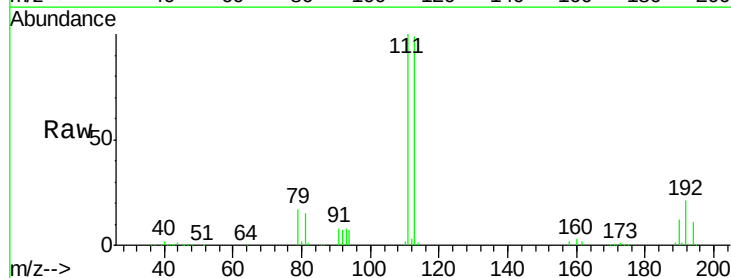


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VX0  
 Ion 87.90 (87.60 to 88.60): VX0

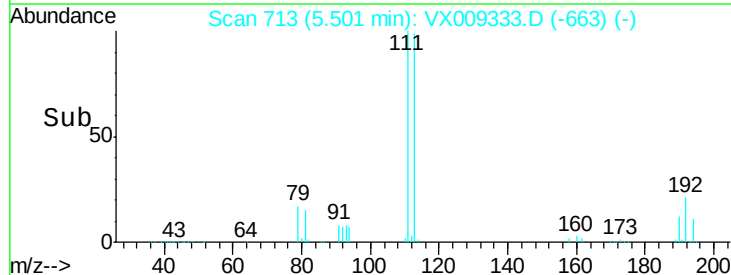
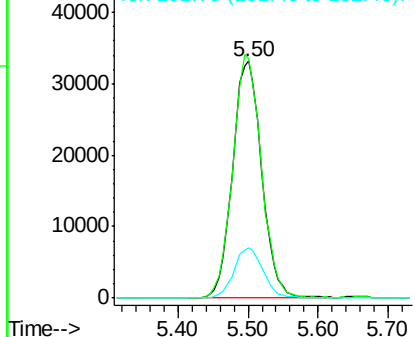


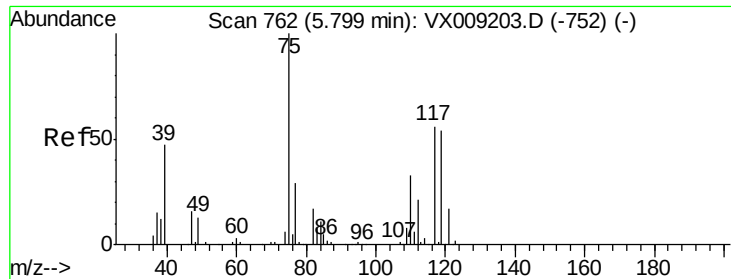
#35  
 Dibromofluoromethane  
 Concen: 49.316 ug/l  
 RT: 5.50 min Scan# 713  
 Delta R.T. 0.01 min  
 Lab File: VX009333.D  
 Acq: 04 May 2019 00:27

Tgt Ion:113 Resp: 95973  
 Ion Ratio Lower Upper  
 113 100  
 111 100.8 82.8 124.2  
 192 21.0 17.0 25.6



Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V

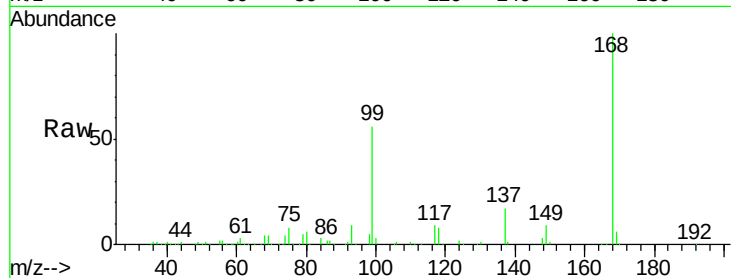




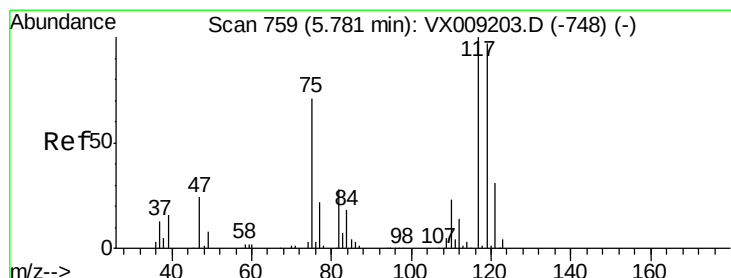
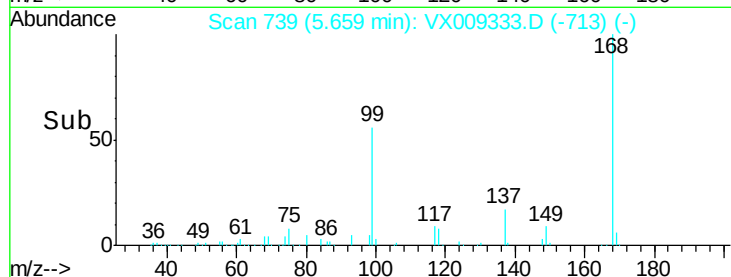
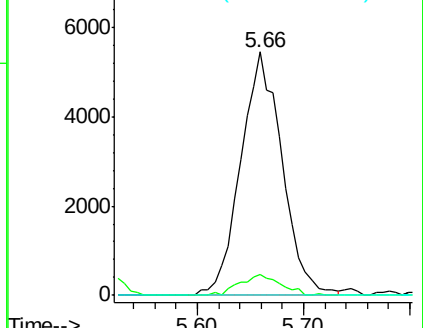
#36  
 1,1-Dichloropropene  
 Concen: 5.161 ug/l  
 RT: 5.66 min Scan# 739  
 Delta R.T. -0.14 min  
 Lab File: VX009333.D  
 Acq: 04 May 2019 00:27

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SS050MW113-190430

| Tot Ion   | 75  | Resp | 14849 |
|-----------|-----|------|-------|
| Ion Ratio | 100 |      |       |
| Lower     |     | 16.9 | 50.6# |
| Upper     |     | 24.8 | 37.2# |

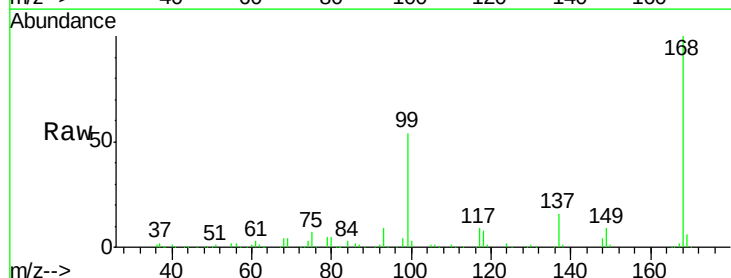


Abundance Ion 74.90 (74.60 to 75.60): VX009333.D (-713) (-)

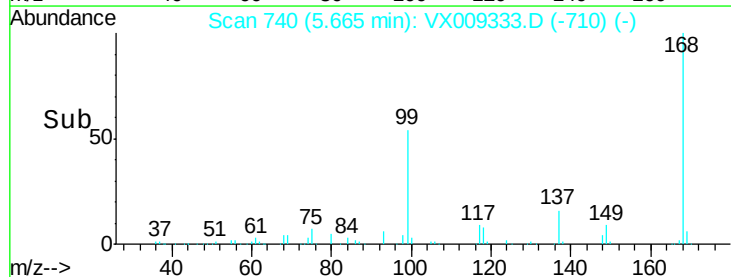
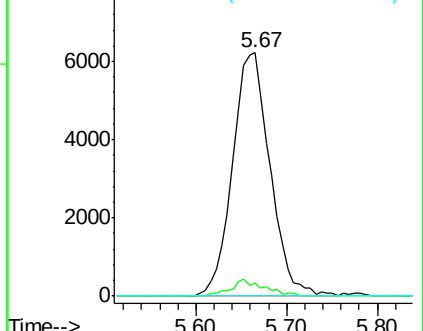


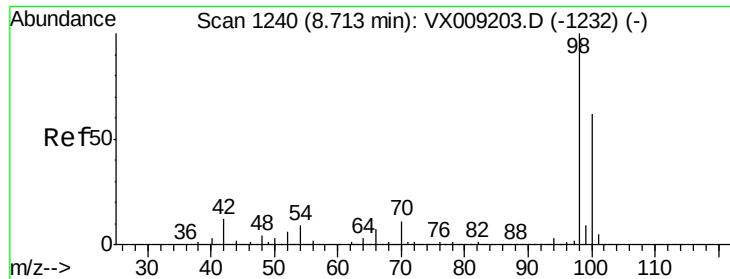
#38  
 Carbon Tetrachloride  
 Concen: 6.827 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.12 min  
 Lab File: VX009333.D  
 Acq: 04 May 2019 00:27

| Tgt Ion                                    | 117 | Resp | 17846  |
|--------------------------------------------|-----|------|--------|
| Ion Ratio <td>100</td> <td></td> <td></td> | 100 |      |        |
| Lower                                      |     | 77.5 | 116.3# |
| Upper                                      |     | 24.7 | 37.1#  |



Abundance Ion 116.80 (116.50 to 117.50): VX009333.D (-710) (-)

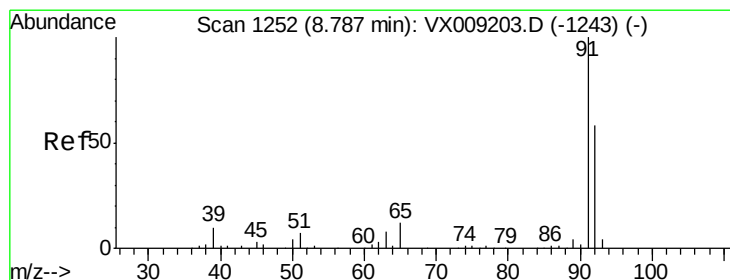
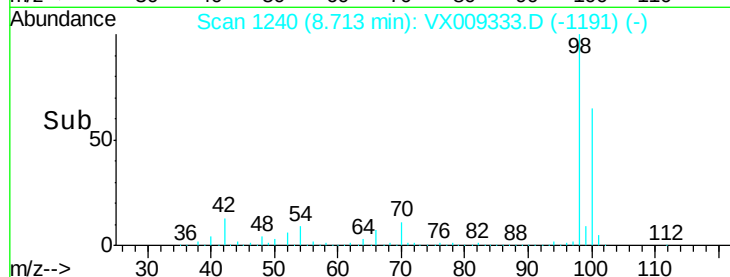
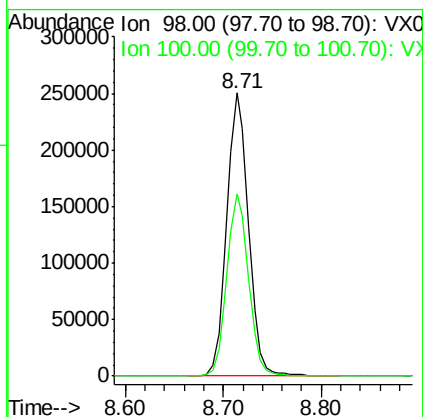
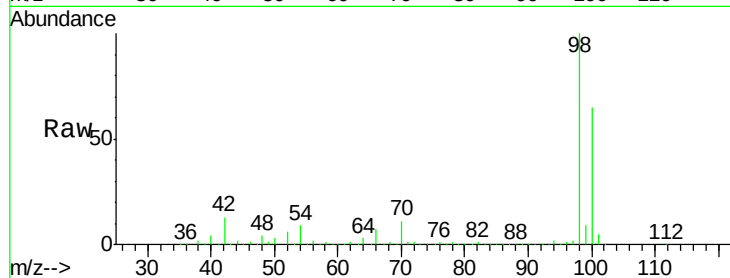




#50  
Toluene-d8  
Concen: 49.243 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. -0.00 min  
Lab File: VX009333.D  
Acq: 04 May 2019 00:27

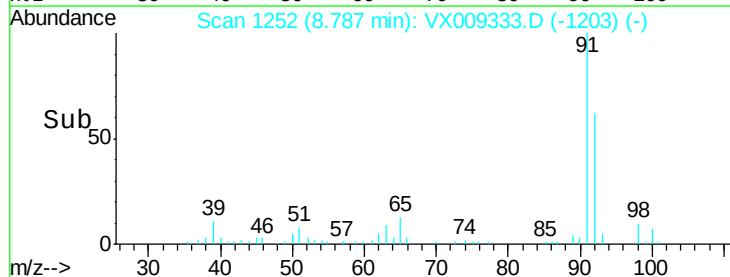
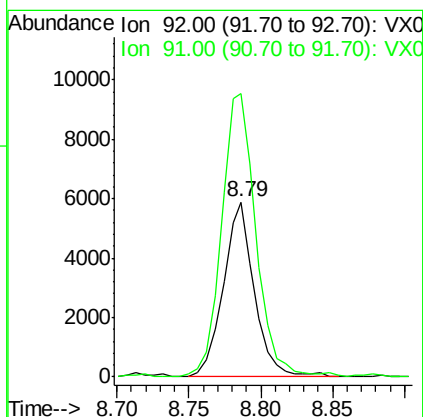
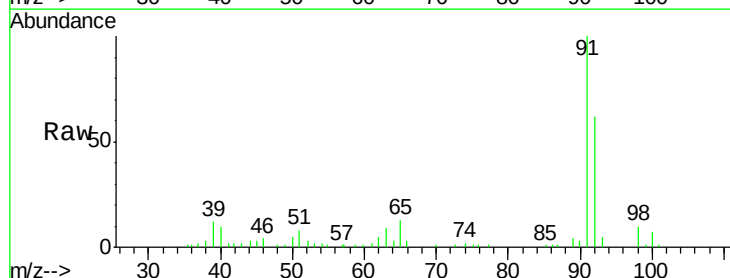
Instrument :  
MSVOA\_X  
ClientSampleId :  
SS050MW113-190430

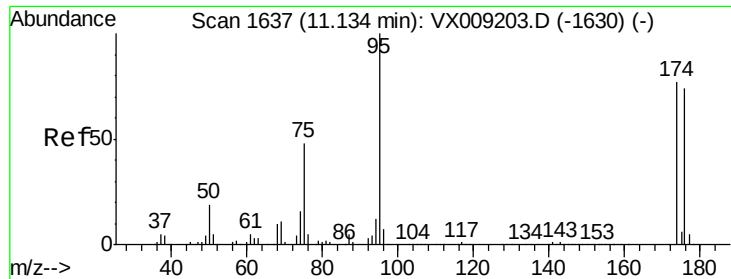
Tot Ion: 98 Resp: 386899  
Ion Ratio Lower Upper  
98 100  
100 64.4 51.2 76.8



#52  
Toluene  
Concen: 1.641 ug/l  
RT: 8.79 min Scan# 1252  
Delta R.T. 0.00 min  
Lab File: VX009333.D  
Acq: 04 May 2019 00:27

Tgt Ion: 92 Resp: 8883  
Ion Ratio Lower Upper  
92 100  
91 179.1 138.8 208.2





#62

4-Bromofluorobenzene

Concen: 45.075 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

SS050MW113-190430

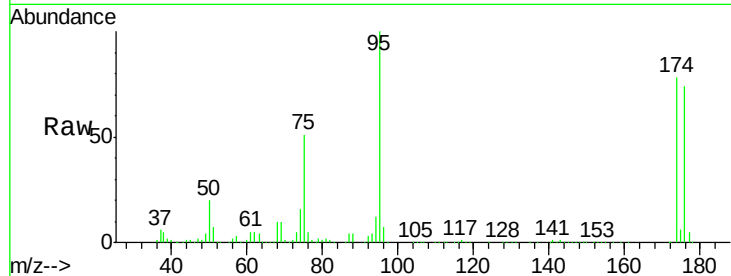
Tot Ion: 95 Resp: 128685

Ion Ratio Lower Upper

95 100

174 82.3 0.0 161.6

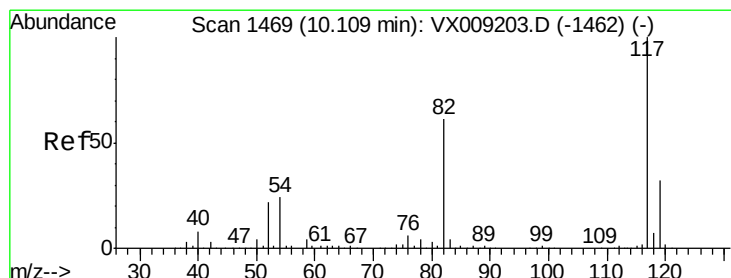
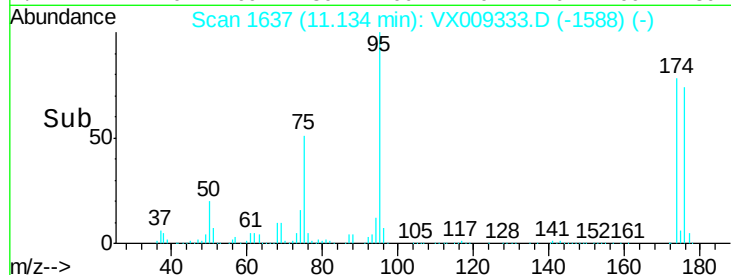
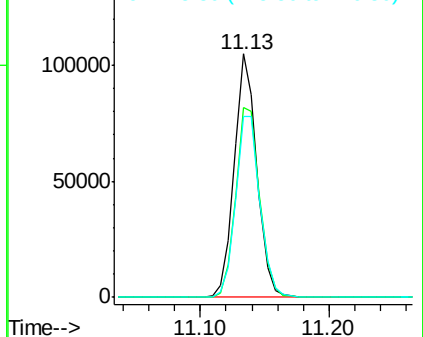
176 79.7 0.0 159.2



Abundance Ion 94.90 (94.60 to 95.60): VX009333.D (-1588) (-)

Ion 173.80 (173.50 to 174.50): VX009333.D (-1588) (-)

Ion 175.80 (175.50 to 176.50): VX009333.D (-1588) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

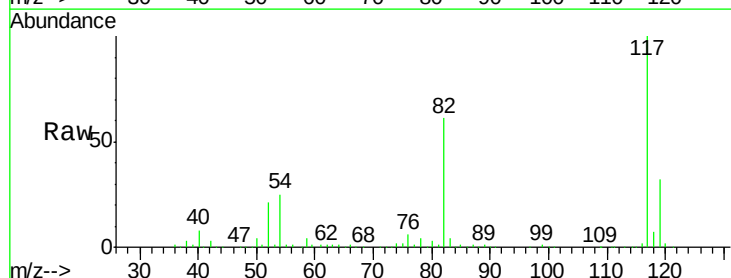
Tgt Ion: 117 Resp: 269255

Ion Ratio Lower Upper

117 100

82 60.6 48.8 73.2

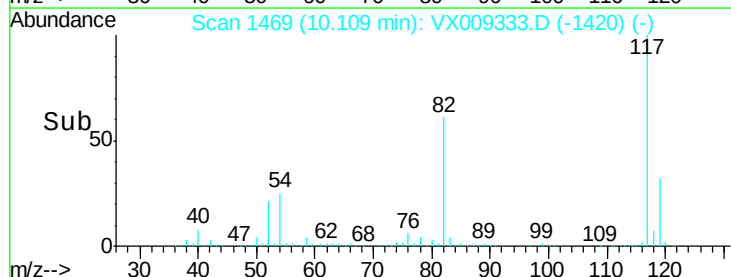
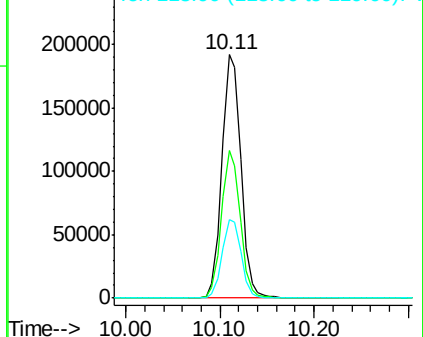
119 32.2 25.8 38.6

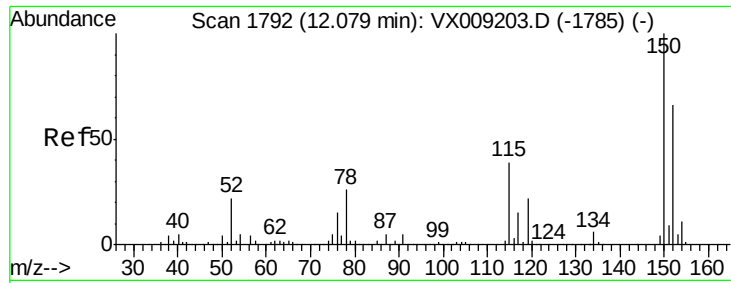


Abundance Ion 116.90 (116.60 to 117.60): VX009333.D (-1420) (-)

Ion 82.00 (81.70 to 82.70): VX009333.D (-1420) (-)

Ion 118.90 (118.60 to 119.60): VX009333.D (-1420) (-)





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. -0.00 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

SS050MW113-190430

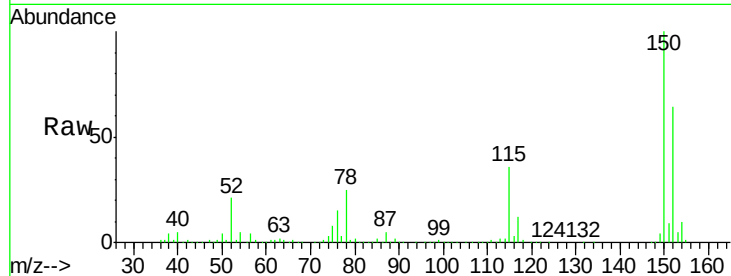
Tot Ion:152 Resp: 118973

Ion Ratio Lower Upper

152 100

115 58.3 41.2 123.6

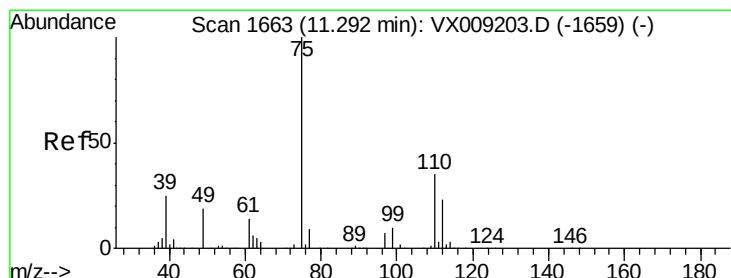
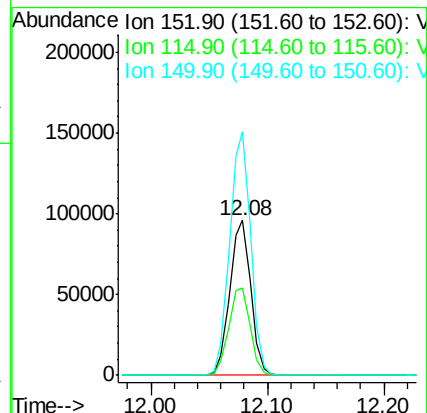
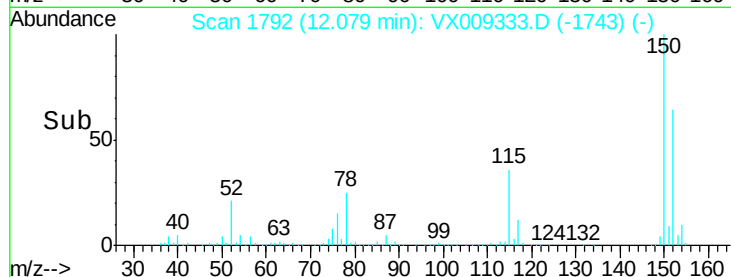
150 157.7 0.0 346.4



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 23.915 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX009333.D

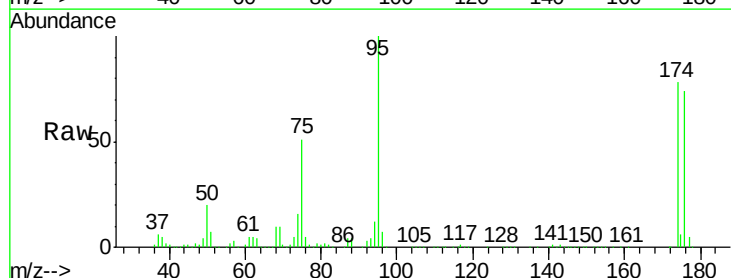
Acq: 04 May 2019 00:27

Tgt Ion: 75 Resp: 65999

Ion Ratio Lower Upper

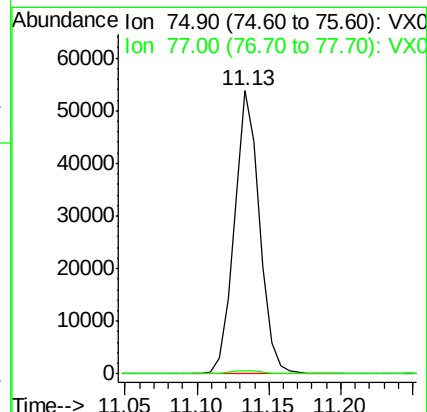
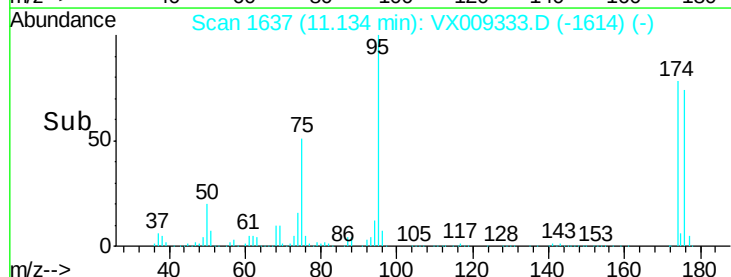
75 100

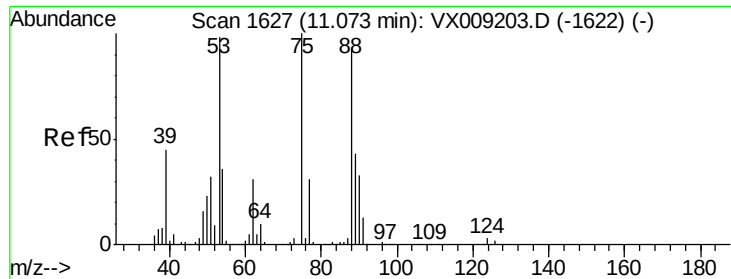
77 1.5 22.1 66.1#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 61.190 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009333.D

Acq: 04 May 2019 00:27

Instrument :

MSVOA\_X

ClientSampleId :

SS050MW113-190430

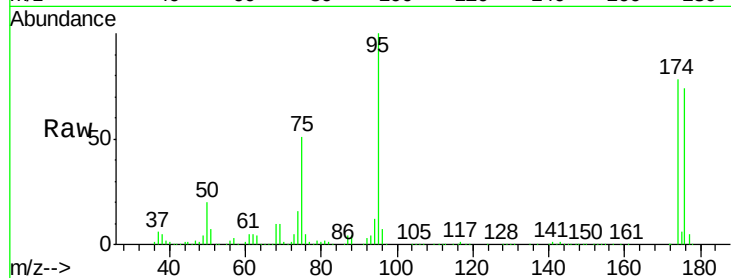
Tot Ion: 75 Resp: 65999

Ion Ratio Lower Upper

75 100

53 0.1 79.0 118.6#

89 0.0 34.7 52.1#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

