

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX052919\  
 Data File : VX009935.D  
 Acq On : 29 May 2019 13:19  
 Operator : JC/SP  
 Sample : K3038-05  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF012MW001-190523

Quant Time: May 30 01:13:49 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X052819W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 29 04:00:56 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 181697   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 290838   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 257000   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 111702   | 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   | 122803   | 47.85 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.70% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 90151    | 49.30 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.60% |          |
| 50) Toluene-d8              | 8.71  | 98   | 364925   | 49.15 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.30% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 123406   | 46.27 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 92.54% |          |

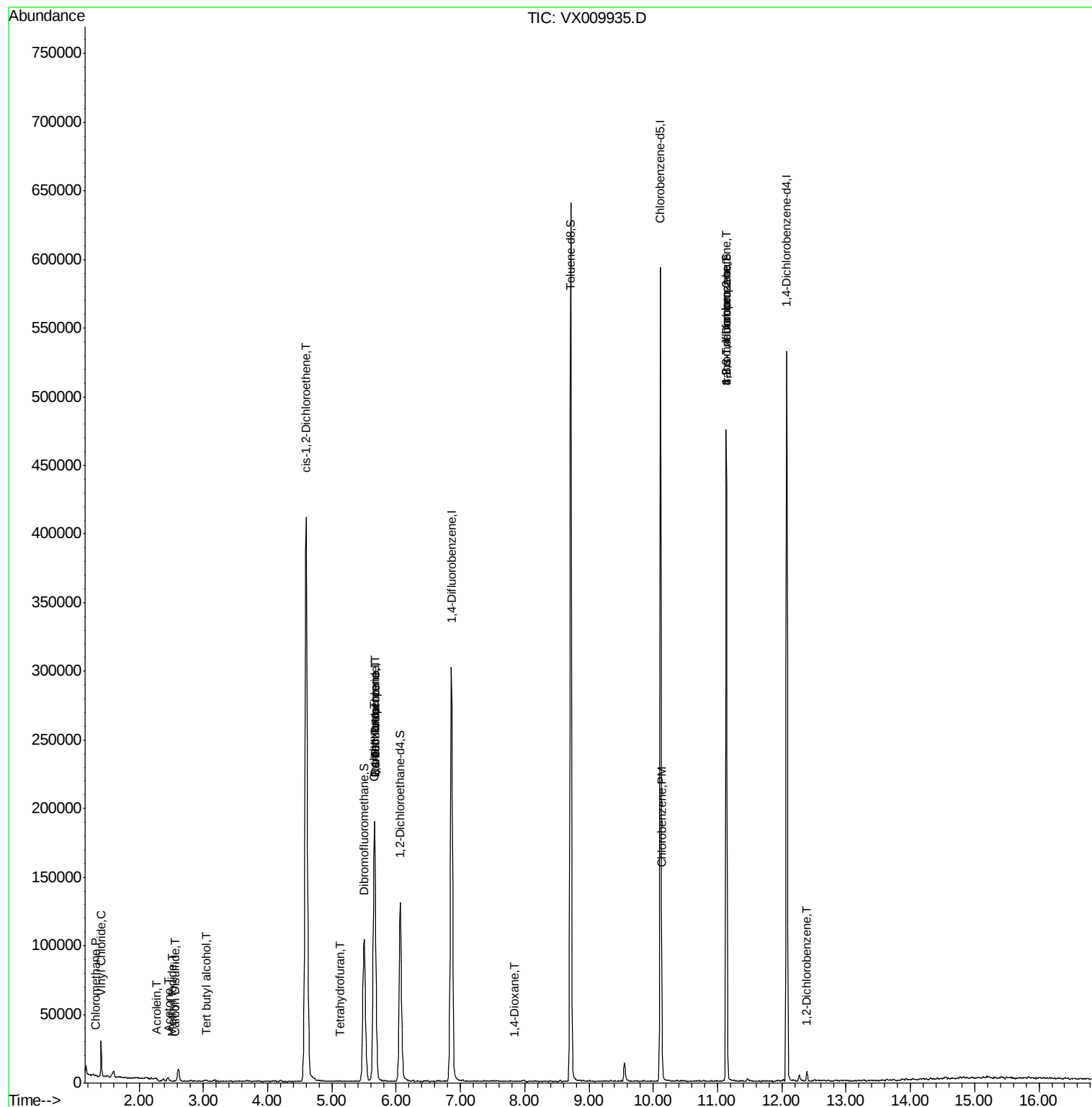
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 3) Chloromethane               | 1.33  | 50   | 706      | 0.237   | ug/l   | 95     |
| 4) Vinyl Chloride              | 1.41  | 62   | 16631    | 6.181   | ug/l   | 100    |
| 10) Methyl Iodide              | 2.52  | 142  | 22       | 4.666   | ug/l # | 42     |
| 11) Tert butyl alcohol         | 3.04  | 59   | 909      | 1.439   | ug/l   | 99     |
| 13) Acrolein                   | 2.28  | 56   | 199      | 21.504  | ug/l # | 56     |
| 16) Acetone                    | 2.45  | 43   | 2592     | 1.748   | ug/l   | 100    |
| 17) Carbon Disulfide           | 2.57  | 76   | 565      | 0.485   | ug/l # | 61     |
| 27) cis-1,2-Dichloroethene     | 4.60  | 96   | 249705   | 105.655 | ug/l   | 88     |
| 29) Tetrahydrofuran            | 5.12  | 42   | 397      | 0.268   | ug/l # | 39     |
| 31) Cyclohexane                | 5.65  | 56   | 4330     | 1.109   | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 5.66  | 75   | 14591    | 4.945   | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.66  | 117  | 16978    | 6.658   | ug/l # | 17     |
| 49) 1,4-Dioxane                | 7.84  | 88   | 25       | 0.409   | ug/l # | 1      |
| 65) Chlorobenzene              | 10.13 | 112  | 4264     | 0.793   | ug/l   | 95     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 63664    | 23.834  | ug/l # | 34     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 63664    | 58.969  | ug/l # | 10     |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 2026     | 0.550   | ug/l   | 98     |

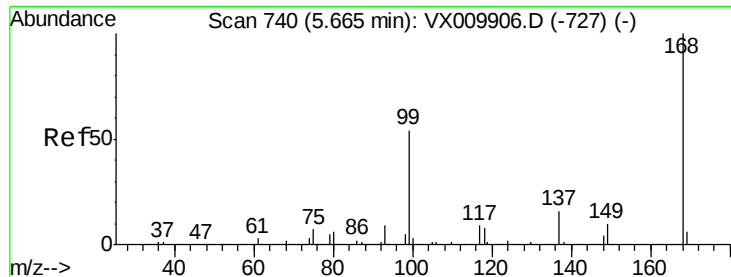
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX052919\  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X052819W.M  
Quant Title : SW846 8260  
QLast Update : Wed May 29 04:00:56 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

Instrument :

MSVOA\_X

ClientSampleId :

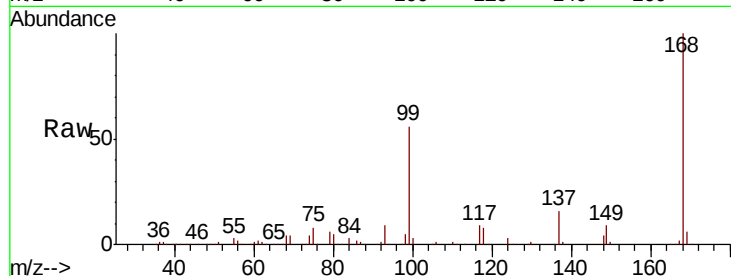
LF012MW001-190523

Tot Ion:168 Resp: 181697

Ion Ratio Lower Upper

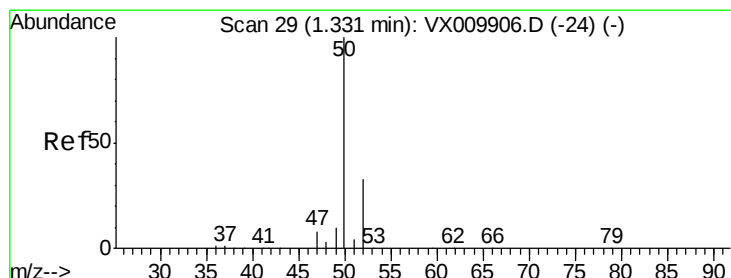
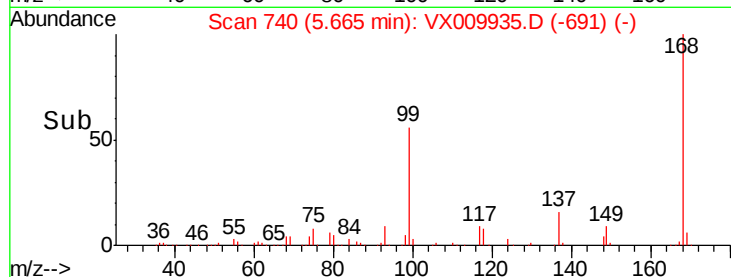
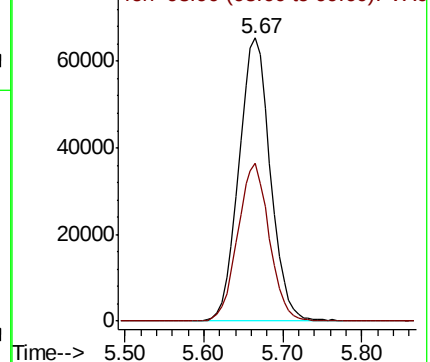
168 100

99 55.5 43.0 64.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: 0.237 ug/l

RT: 1.33 min Scan# 29

Delta R.T. 0.00 min

Lab File: VX009935.D

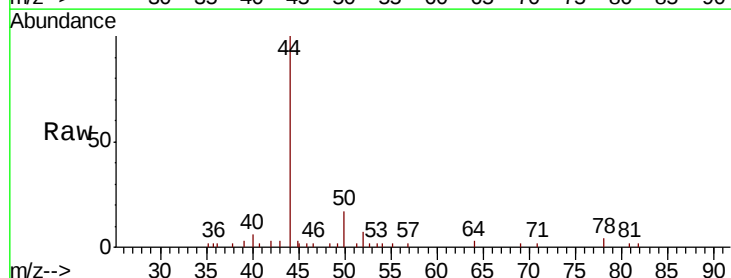
Acq: 29 May 2019 13:19

Tgt Ion: 50 Resp: 706

Ion Ratio Lower Upper

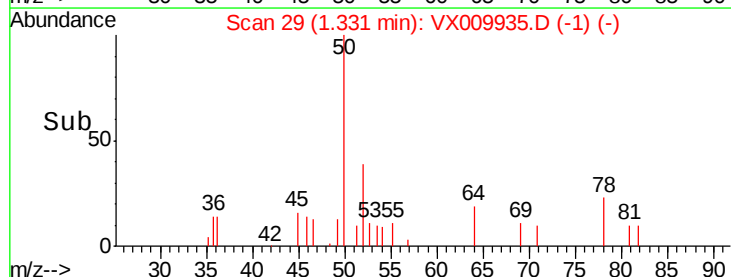
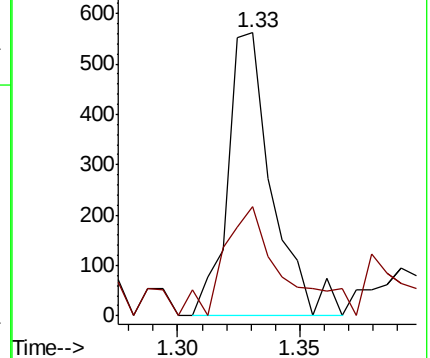
50 100

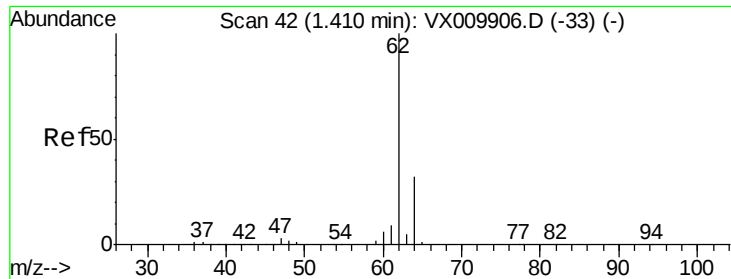
52 29.5 26.0 39.0



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#4

Vinyl Chloride

Concen: 6.181 ug/l

RT: 1.41 min Scan# 42

Delta R.T. 0.00 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

Instrument :

MSVOA\_X

ClientSampleId :

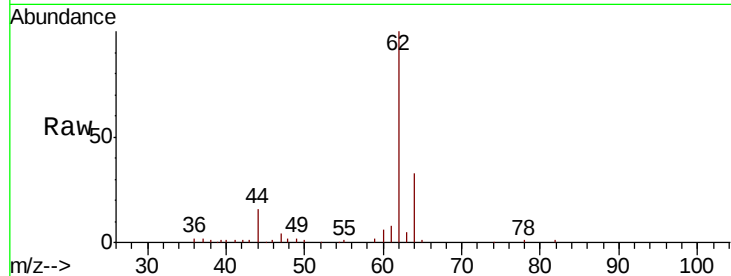
LF012MW001-190523

Tot Ion: 62 Resp: 16631

Ion Ratio Lower Upper

62 100

64 32.3 25.7 38.5



Abundance Ion 61.90 (61.60 to 62.60): VX009935.D (-1) (-)

Ion 63.90 (63.60 to 64.60): VX009935.D (-1) (-)

1.41

15000

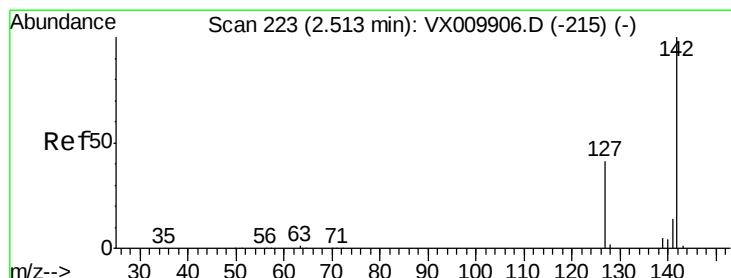
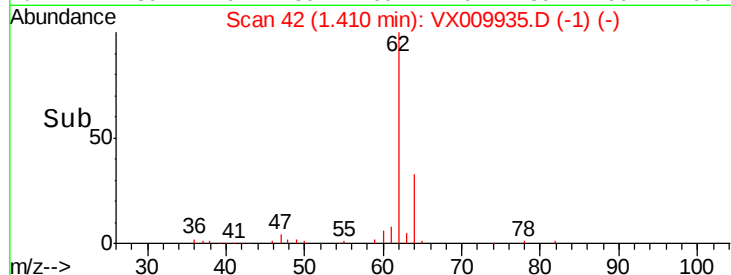
10000

5000

0

Time-->

1.35 1.40 1.45



#10

Methyl Iodide

Concen: 4.666 ug/l

RT: 2.52 min Scan# 224

Delta R.T. 0.01 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

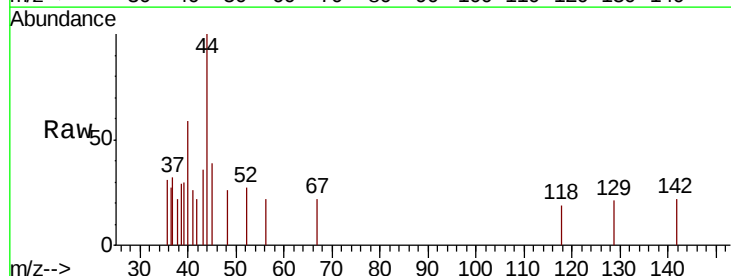
Tgt Ion: 142 Resp: 22

Ion Ratio Lower Upper

142 100

127 0.0 33.0 49.4#

141 0.0 11.4 17.0#



Abundance Ion 141.80 (141.50 to 142.50): VX009935.D (-174) (-)

Ion 126.80 (126.50 to 127.50): VX009935.D (-174) (-)

Ion 140.80 (140.50 to 141.50): VX009935.D (-174) (-)

2.52

80

60

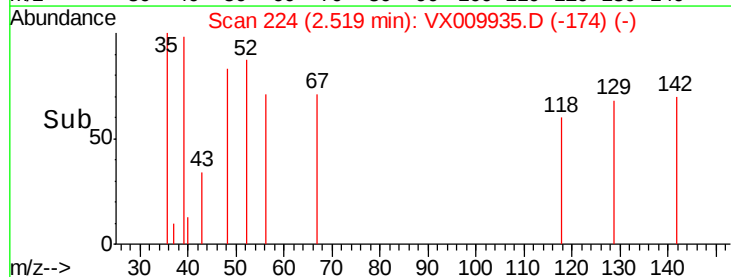
40

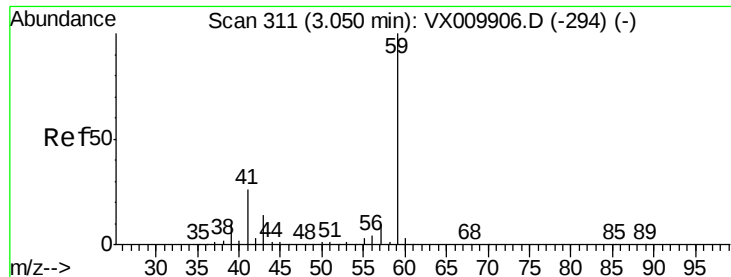
20

0

Time-->

2.50 2.51 2.52 2.53 2.54

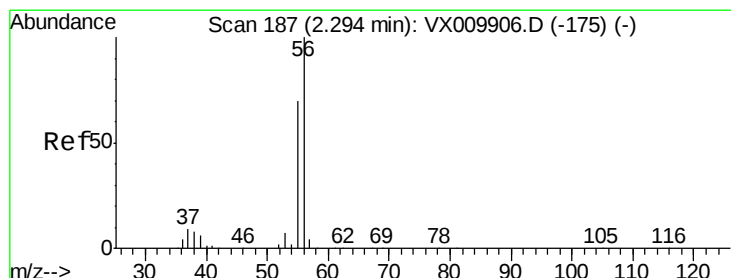
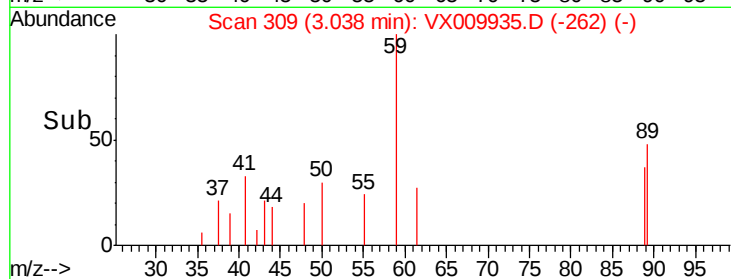
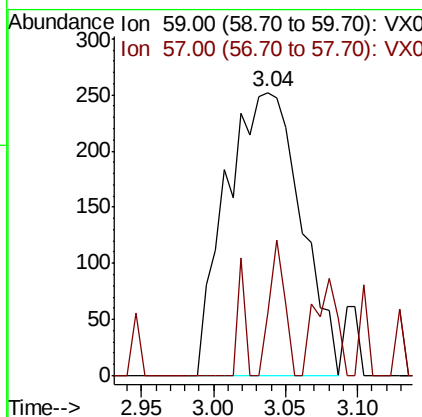
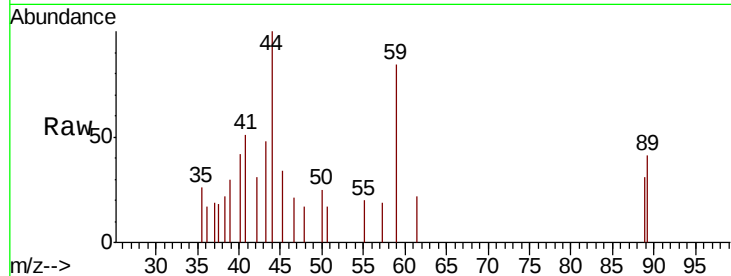




#11  
Tert butyl alcohol  
Concen: 1.439 ug/l  
RT: 3.04 min Scan# 309  
Delta R.T. -0.01 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

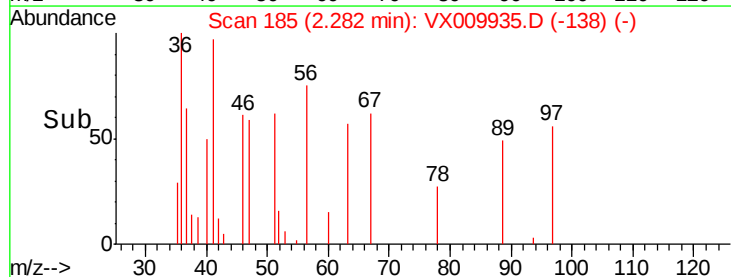
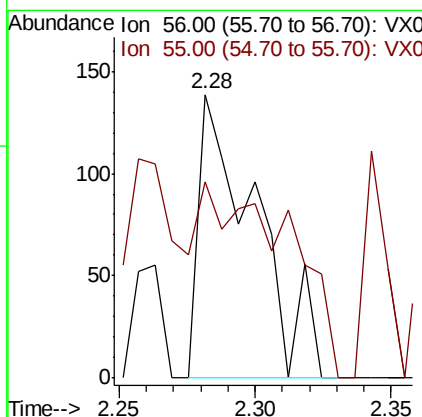
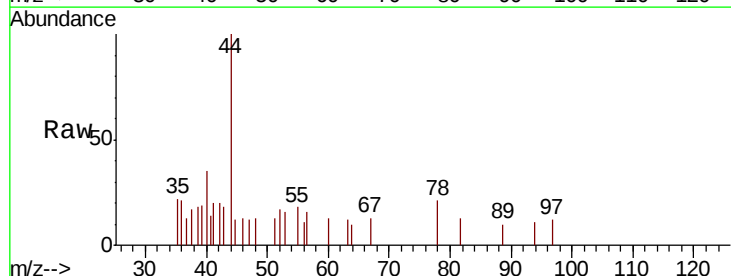
Instrument :  
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LF012MW001-190523

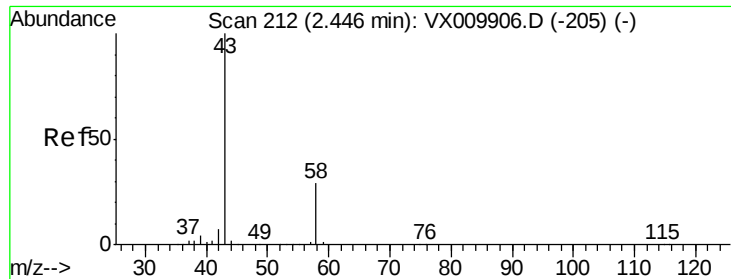
Tot Ion: 59 Resp: 909  
Ion Ratio Lower Upper  
59 100  
57 9.7 8.2 12.2



#13  
Acrolein  
Concen: 21.504 ug/l  
RT: 2.28 min Scan# 185  
Delta R.T. -0.01 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

Tgt Ion: 56 Resp: 199  
Ion Ratio Lower Upper  
56 100  
55 108.0 57.0 85.4#





#16

Acetone

Concen: 1.748 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

Instrument :

MSVOA\_X

ClientSampleId :

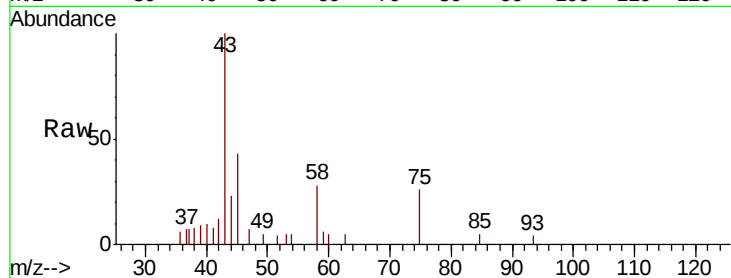
LF012MW001-190523

Tot Ion: 43 Resp: 2592

Ion Ratio Lower Upper

43 100

58 29.1 23.2 34.8



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.45

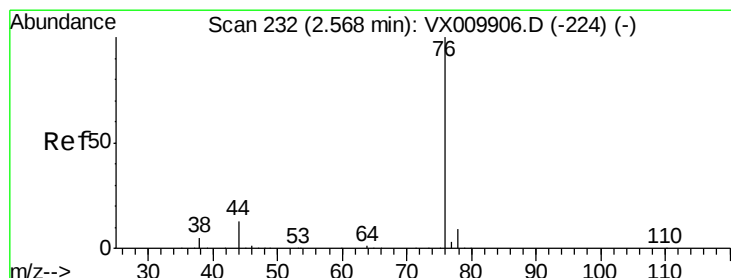
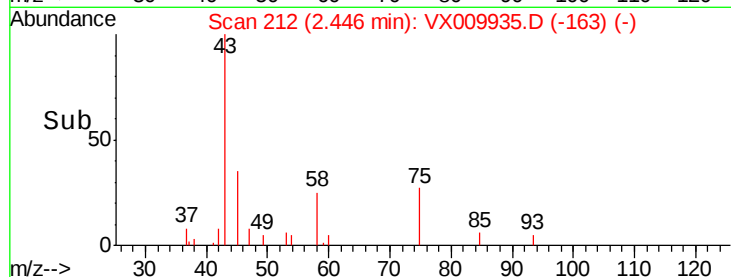
1500

1000

500

0

Time-->



#17

Carbon Disulfide

Concen: 0.485 ug/l

RT: 2.57 min Scan# 232

Delta R.T. 0.00 min

Lab File: VX009935.D

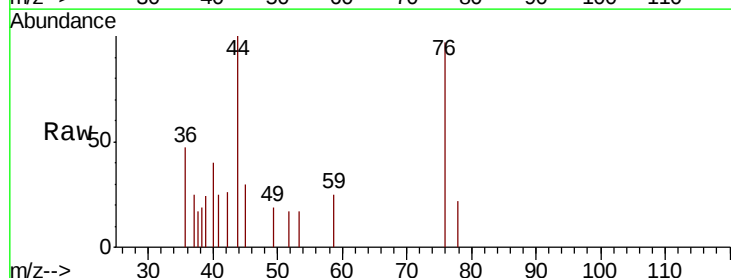
Acq: 29 May 2019 13:19

Tgt Ion: 76 Resp: 565

Ion Ratio Lower Upper

76 100

78 22.7 7.0 10.6#



Abundance Ion 75.90 (75.60 to 76.60): VX0

Ion 77.90 (77.60 to 78.60): VX0

2.57

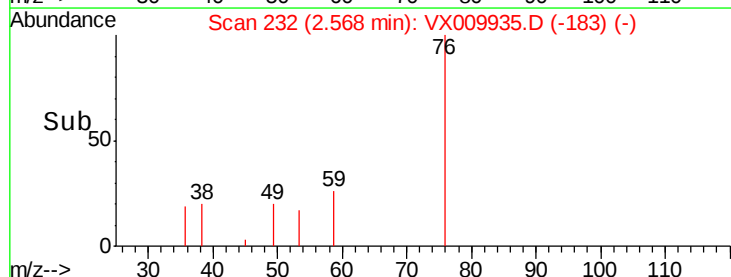
300

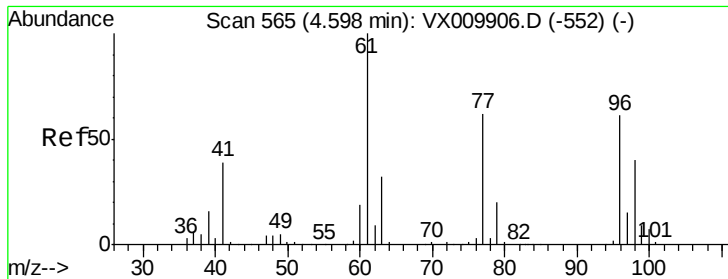
200

100

0

Time-->



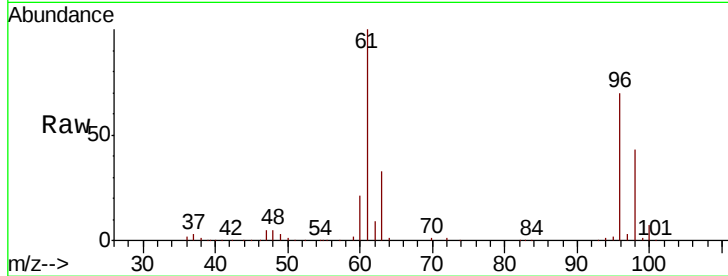


#27

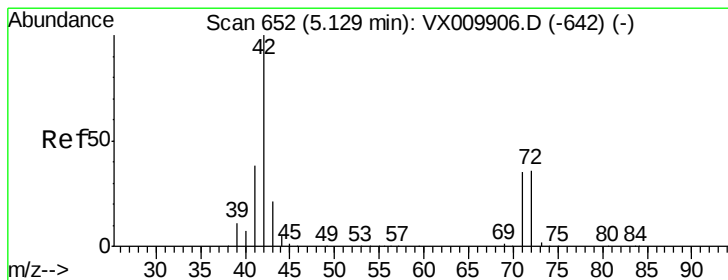
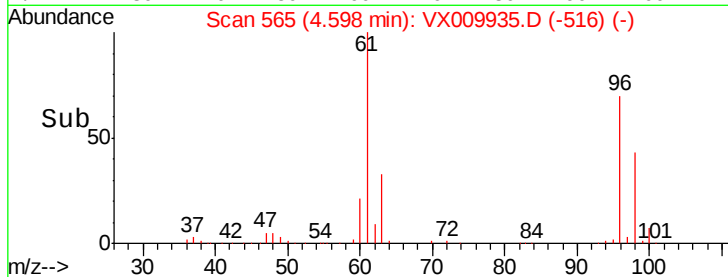
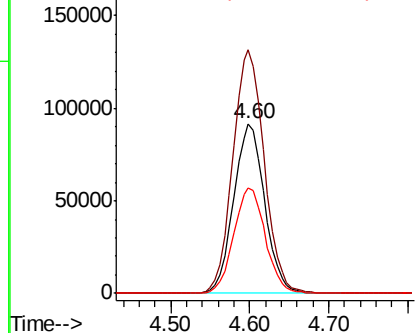
cis-1,2-Dichloroethene  
 Concen: 105.655 ug/l  
 RT: 4.60 min Scan# 565  
 Delta R.T. 0.00 min  
 Lab File: VX009935.D  
 Acq: 29 May 2019 13:19

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF012MW001-190523

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 145.7 | 0.0   | 334.0 |
| 98      | 63.5  | 0.0   | 131.6 |



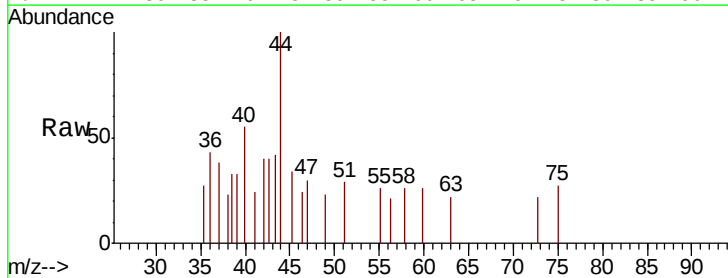
Abundance Ion 95.90 (95.60 to 96.60): VX0  
 Ion 60.90 (60.60 to 61.60): VX0  
 Ion 97.90 (97.60 to 98.60): VX0



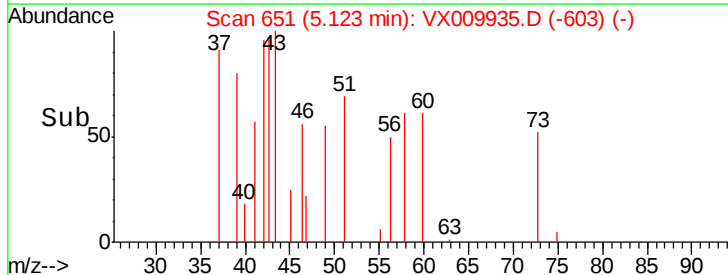
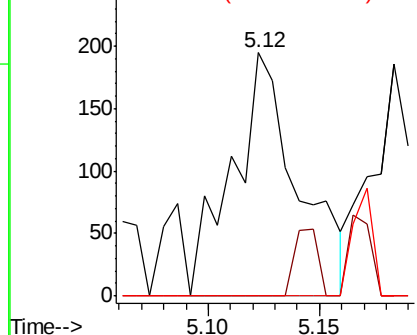
#29

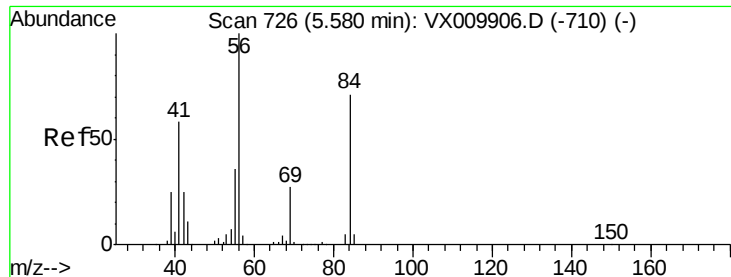
Tetrahydrofuran  
 Concen: 0.268 ug/l  
 RT: 5.12 min Scan# 651  
 Delta R.T. -0.01 min  
 Lab File: VX009935.D  
 Acq: 29 May 2019 13:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 0.0   | 29.2  | 43.8# |
| 71      | 0.0   | 27.6  | 41.4# |



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

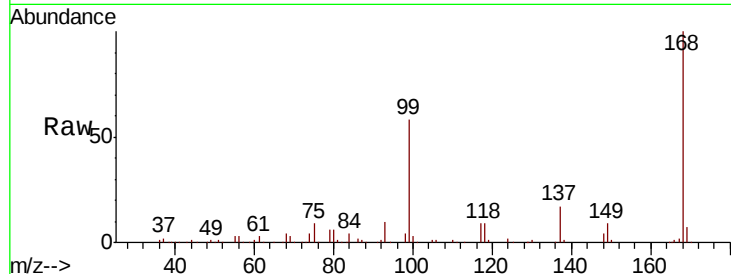




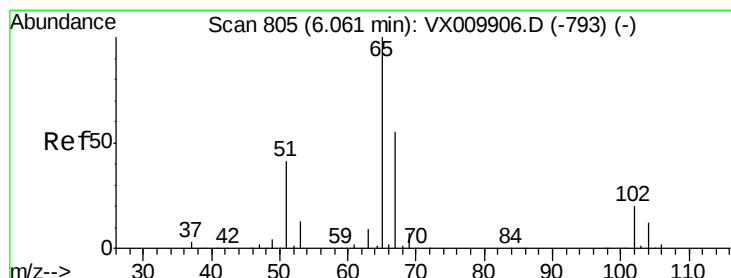
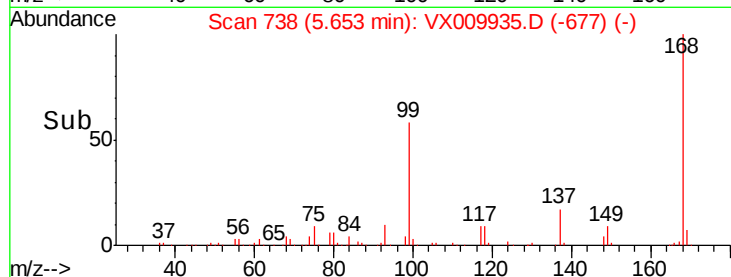
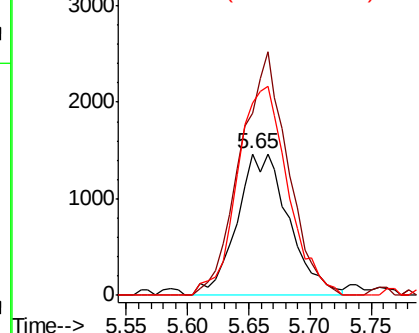
#31  
Cyclohexane  
Concen: 1.109 ug/l  
RT: 5.65 min Scan# 738  
Delta R.T. 0.07 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

Instrument :  
MSVOA\_X  
ClientSampleId :  
LF012MW001-190523

Tot Ion: 56 Resp: 4330  
Ion Ratio Lower Upper  
56 100  
69 128.4 21.6 32.4#  
84 135.9 56.8 85.2#

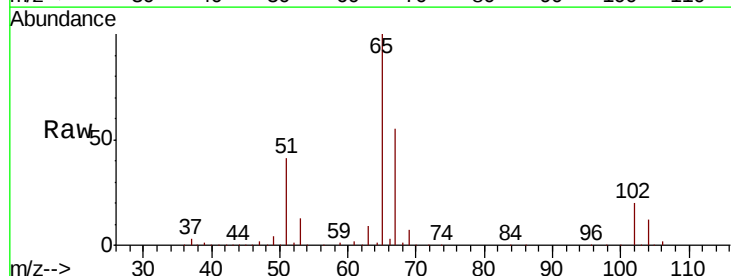


Abundance Ion 56.00 (55.70 to 56.70): VX0  
Ion 69.00 (68.70 to 69.70): VX0  
Ion 84.00 (83.70 to 84.70): VX0

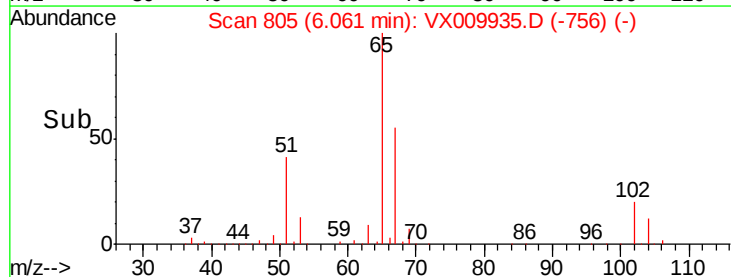
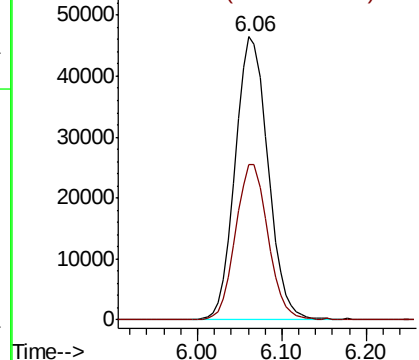


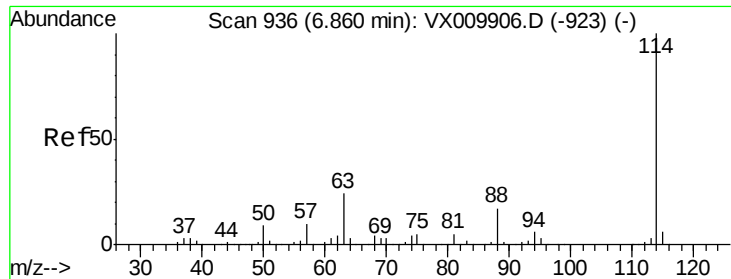
#33  
1,2-Dichloroethane-d4  
Concen: 47.846 ug/l  
RT: 6.06 min Scan# 805  
Delta R.T. 0.00 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

Tgt Ion: 65 Resp: 122803  
Ion Ratio Lower Upper  
65 100  
67 54.2 0.0 108.4



Abundance Ion 64.90 (64.60 to 65.60): VX0  
Ion 66.90 (66.60 to 67.60): VX0

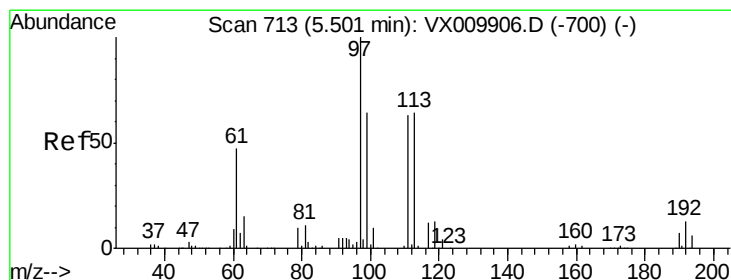
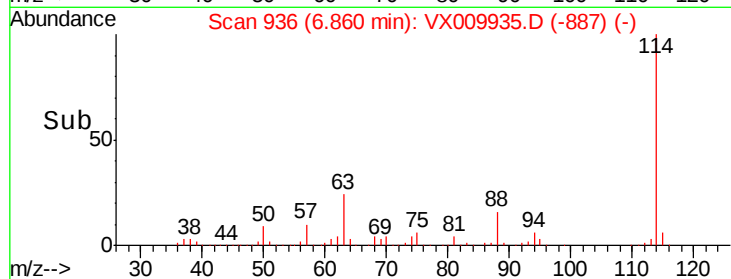
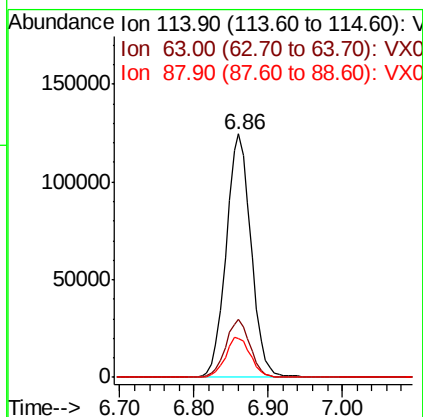
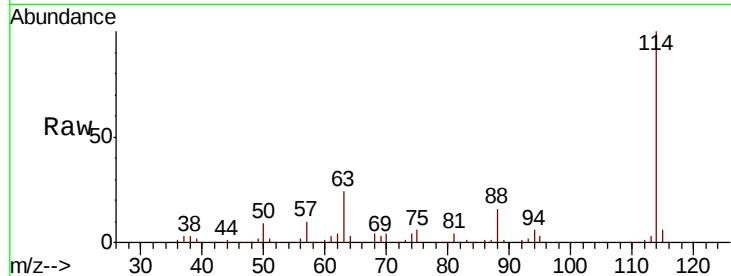




#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.86 min Scan# 936  
Delta R.T. 0.00 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

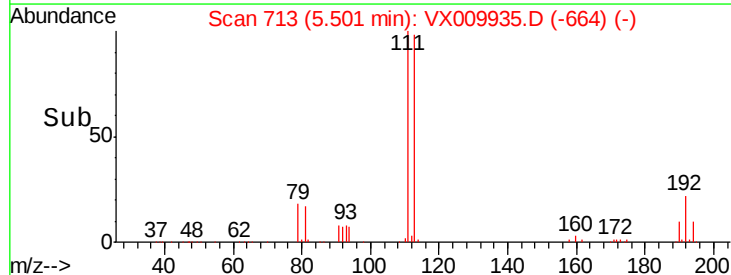
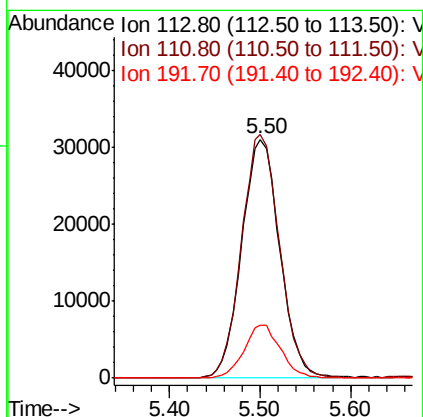
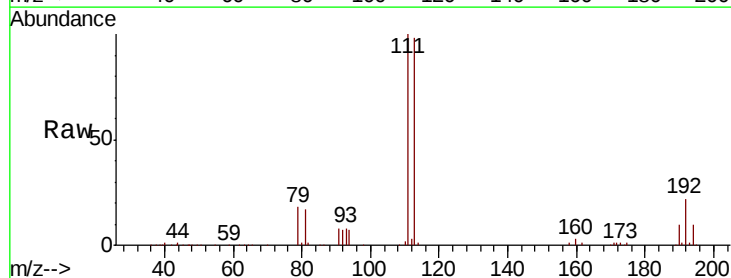
Instrument :  
MSVOA\_X  
ClientSampleId :  
LF012MW001-190523

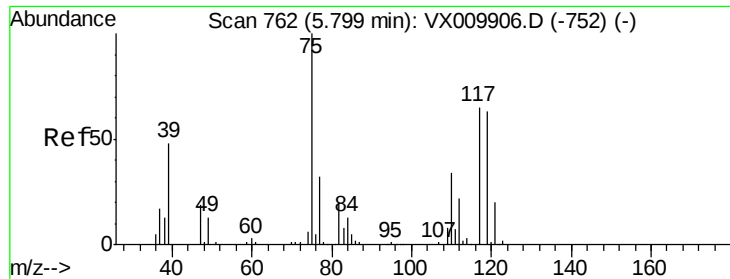
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 23.6  | 0.0   | 47.4  |
| 88      | 16.1  | 0.0   | 33.0  |



#35  
Dibromofluoromethane  
Concen: 49.303 ug/l  
RT: 5.50 min Scan# 713  
Delta R.T. 0.00 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 101.9 | 82.2  | 123.2 |
| 192     | 21.4  | 17.1  | 25.7  |





#36

1,1-Dichloropropene

Concen: 4.945 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.14 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

Instrument :

MSVOA\_X

ClientSampleId :

LF012MW001-190523

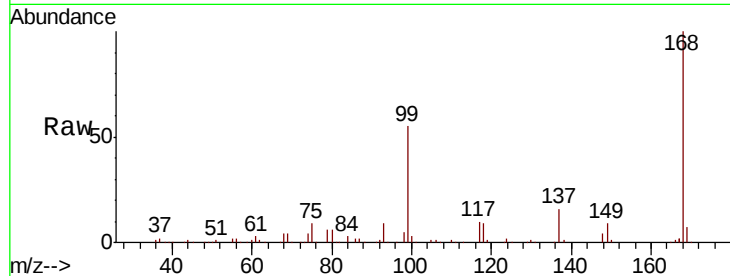
Tot Ion: 75 Resp: 14591

Ion Ratio Lower Upper

75 100

110 8.7 16.7 50.1#

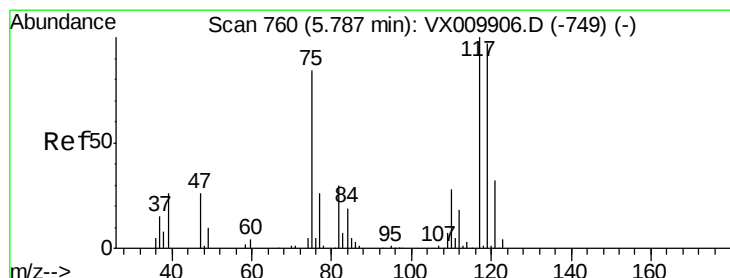
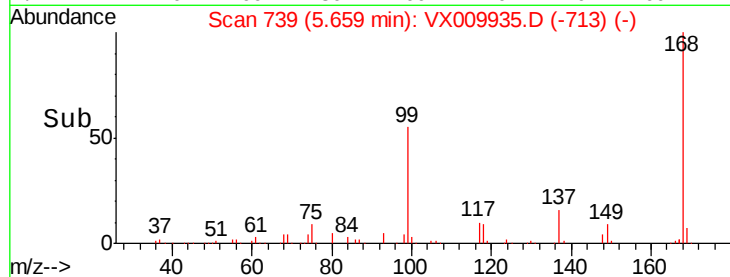
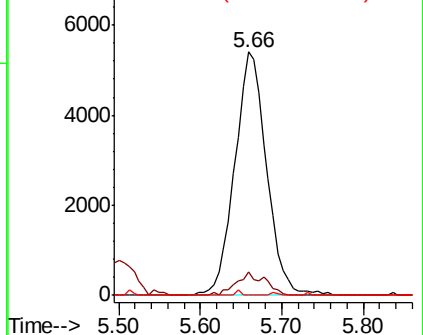
77 0.3 25.0 37.4#



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: 6.658 ug/l

RT: 5.66 min Scan# 739

Delta R.T. -0.13 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

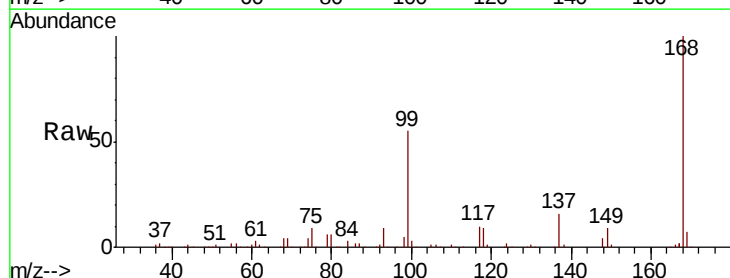
Tgt Ion: 117 Resp: 16978

Ion Ratio Lower Upper

117 100

119 6.8 77.3 115.9#

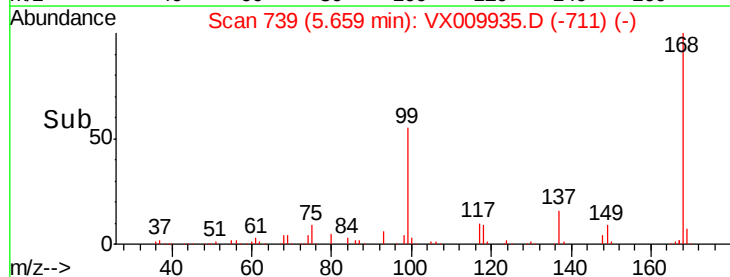
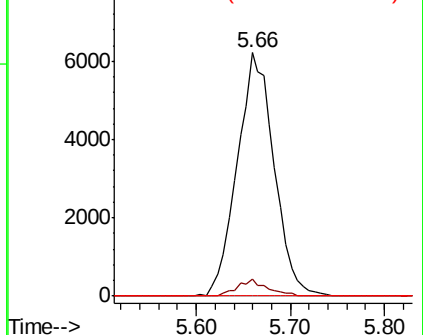
121 0.0 25.4 38.0#

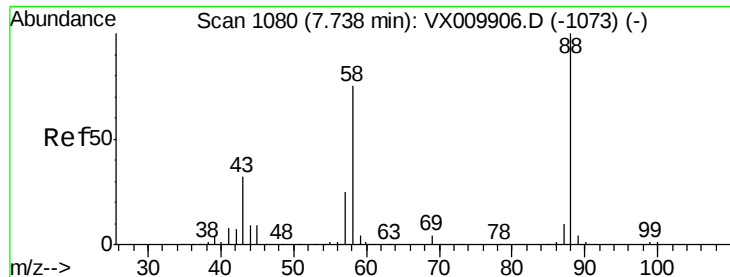


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V

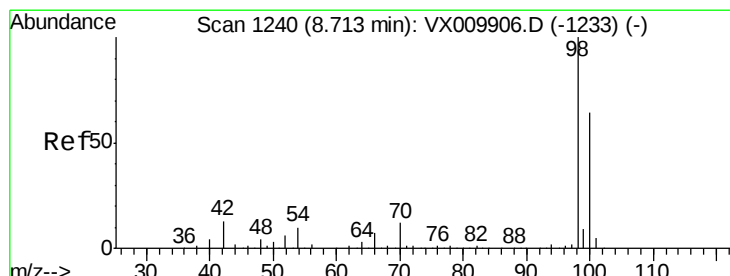
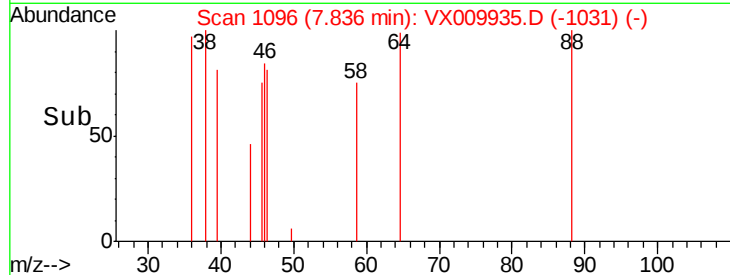
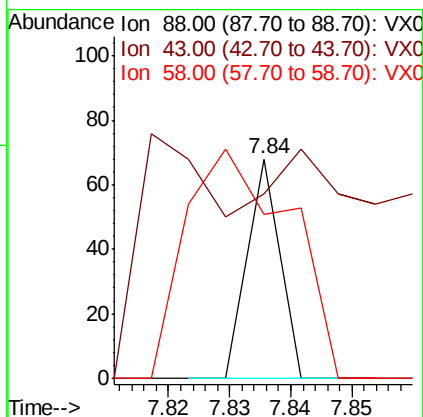
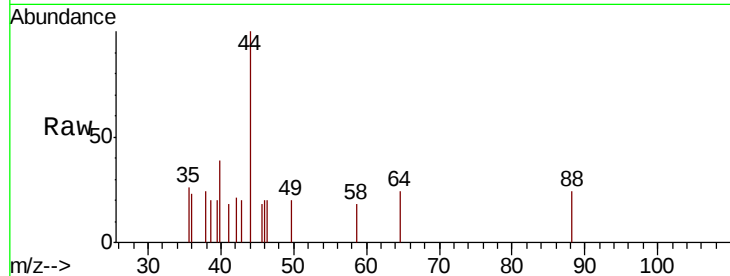




#49  
1,4-Dioxane  
Concen: 0.409 ug/l  
RT: 7.84 min Scan# 1096  
Delta R.T. 0.10 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

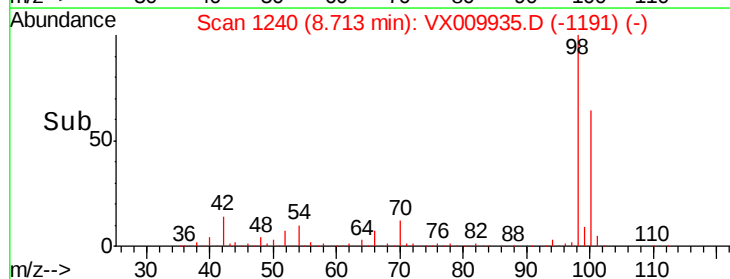
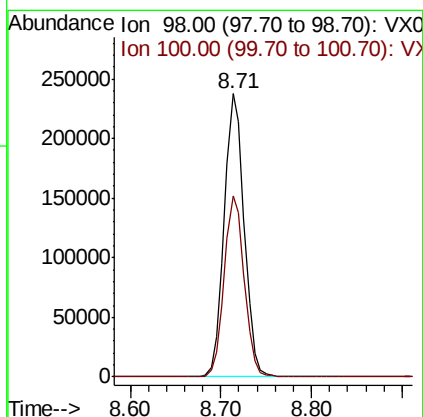
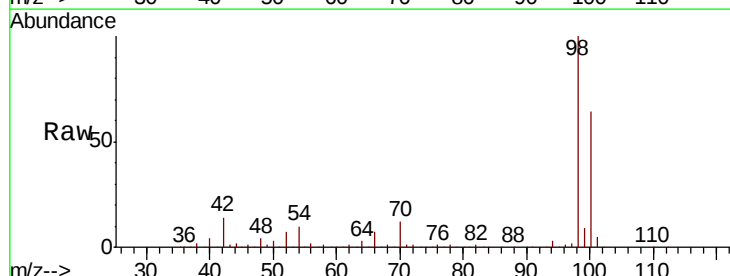
Instrument :  
MSVOA\_X  
ClientSampleId :  
LF012MW001-190523

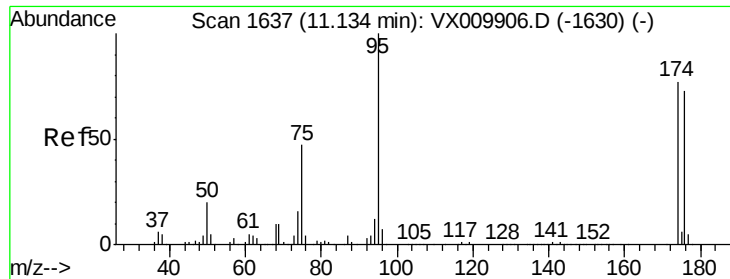
Tot Ion: 88 Resp: 25  
Ion Ratio Lower Upper  
88 100  
43 284.0 30.2 45.4#  
58 336.0 64.0 96.0#



#50  
Toluene-d8  
Concen: 49.147 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

Tgt Ion: 98 Resp: 364925  
Ion Ratio Lower Upper  
98 100  
100 64.1 51.5 77.3





#62

4-Bromofluorobenzene

Concen: 46.272 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

Instrument :

MSVOA\_X

ClientSampleId :

LF012MW001-190523

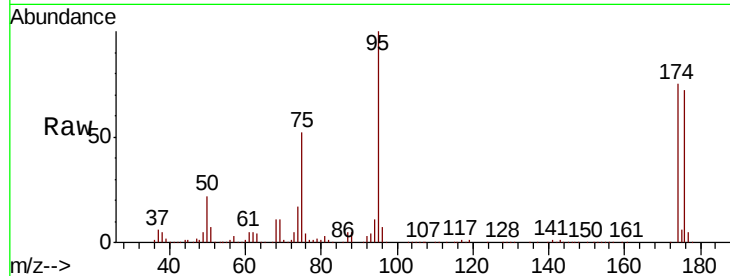
Tot Ion: 95 Resp: 123406

Ion Ratio Lower Upper

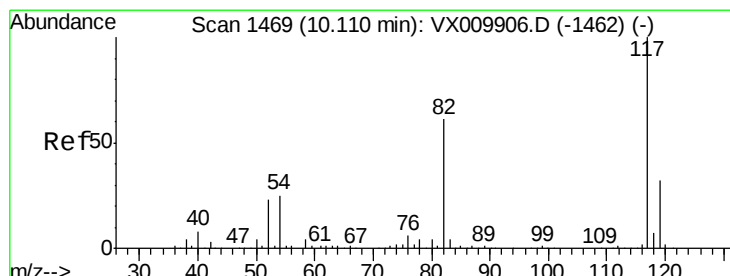
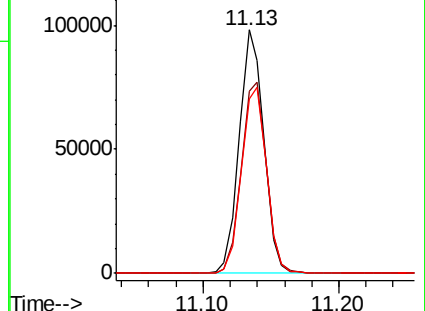
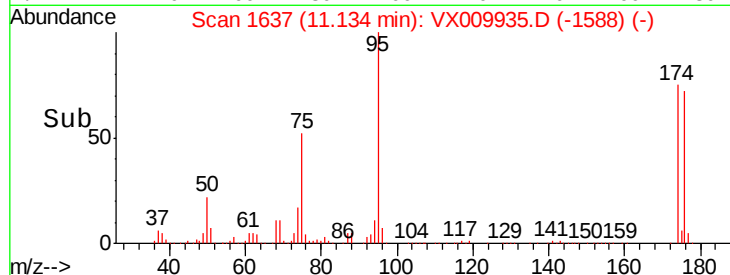
95 100

174 80.3 0.0 160.4

176 77.9 0.0 154.6



Abundance Ion 94.90 (94.60 to 95.60): VX009935.D (-1588) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

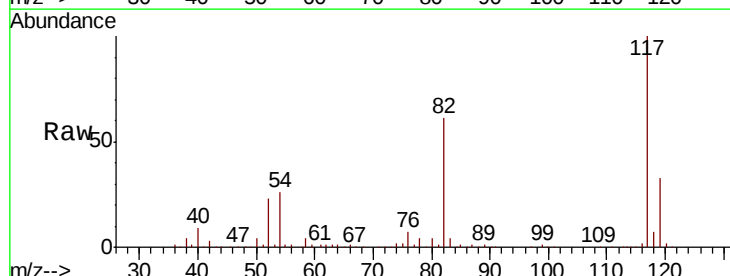
Tgt Ion: 117 Resp: 257000

Ion Ratio Lower Upper

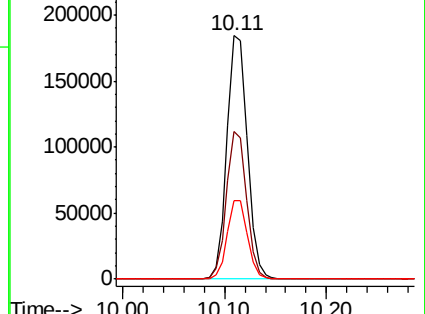
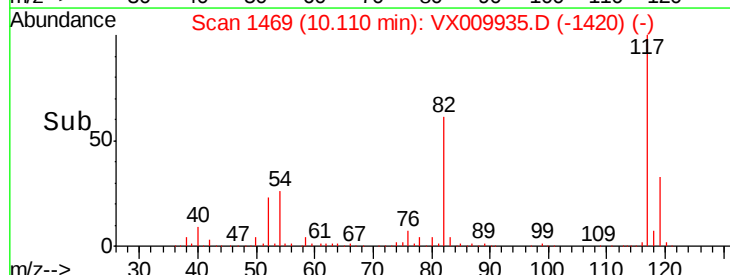
117 100

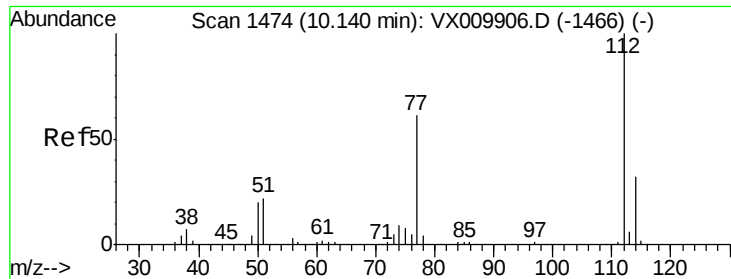
82 60.9 49.2 73.8

119 32.5 25.2 37.8



Abundance Ion 116.90 (116.60 to 117.60): VX009935.D (-1420) (-)

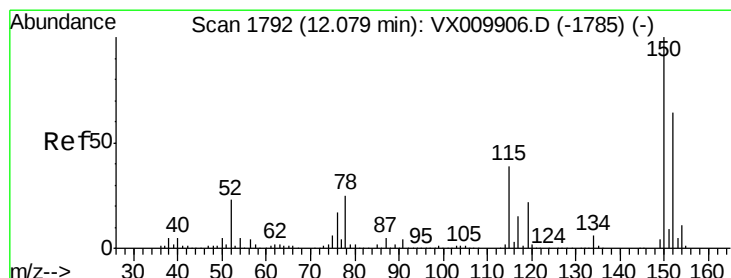
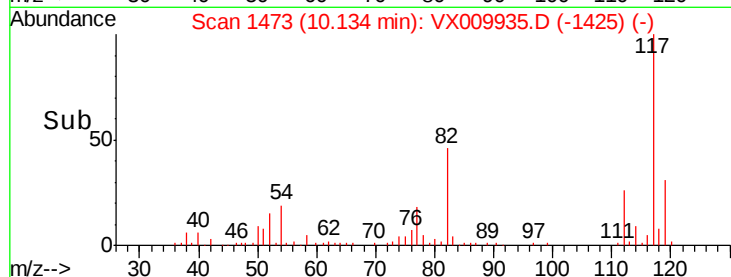
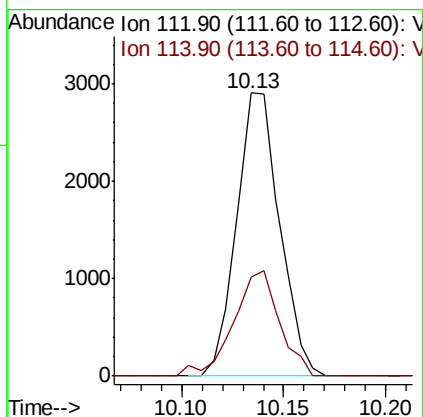
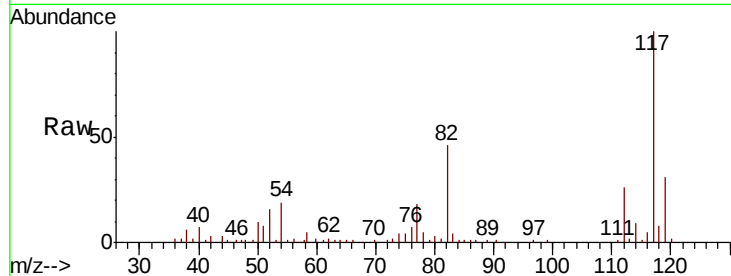




#65  
Chlorobenzene  
Concen: 0.793 ug/l  
RT: 10.13 min Scan# 1473  
Delta R.T. -0.01 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

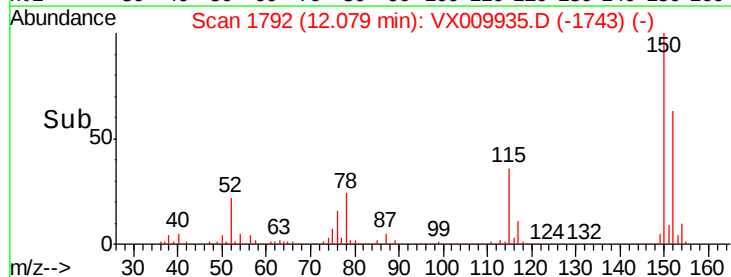
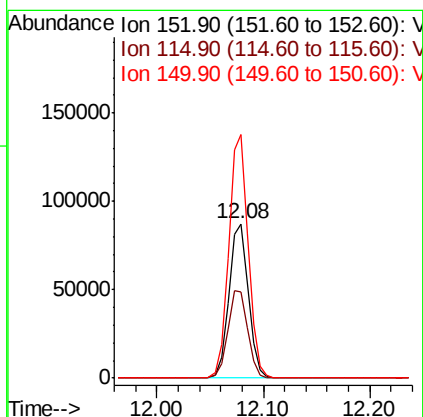
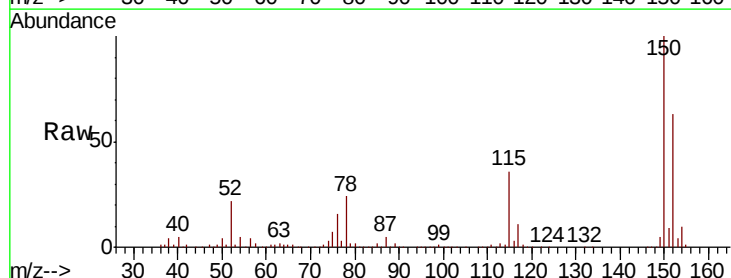
Instrument :  
MSVOA\_X  
ClientSampleId :  
LF012MW001-190523

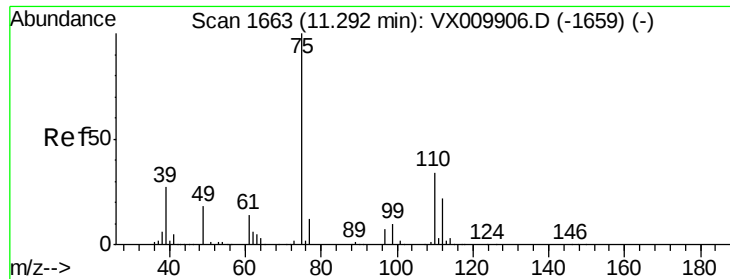
Tot Ion:112 Resp: 4264  
Ion Ratio Lower Upper  
112 100  
114 35.1 25.8 38.8



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. 0.00 min  
Lab File: VX009935.D  
Acq: 29 May 2019 13:19

Tgt Ion:152 Resp: 111702  
Ion Ratio Lower Upper  
152 100  
115 57.9 41.4 124.2  
150 156.9 0.0 345.2





#76

1,2,3-Trichloropropane

Concen: 23.834 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

Instrument :

MSVOA\_X

ClientSampleId :

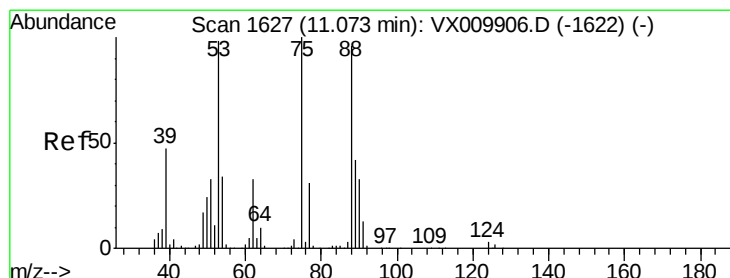
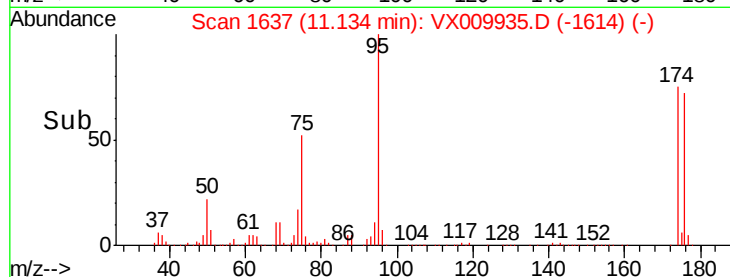
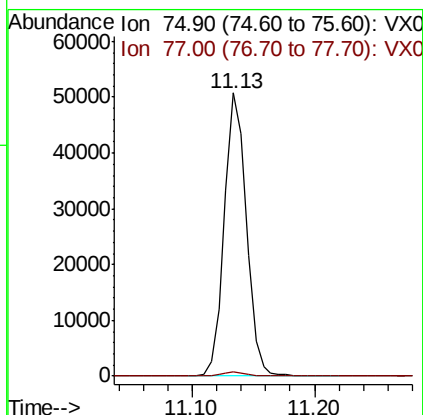
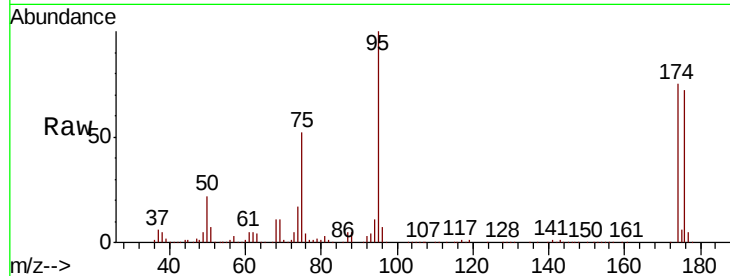
LF012MW001-190523

Tot Ion: 75 Resp: 63664

Ion Ratio Lower Upper

75 100

77 1.6 22.1 66.1#



#81

trans-1,4-Dichloro-2-butene

Concen: 58.969 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX009935.D

Acq: 29 May 2019 13:19

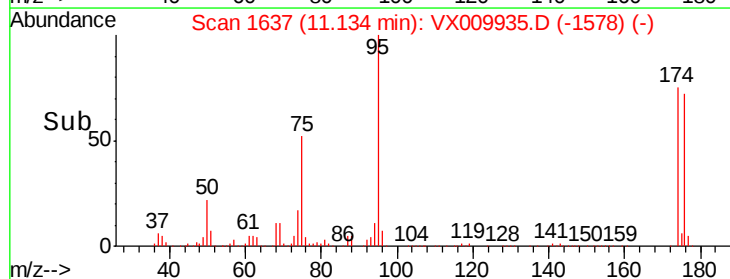
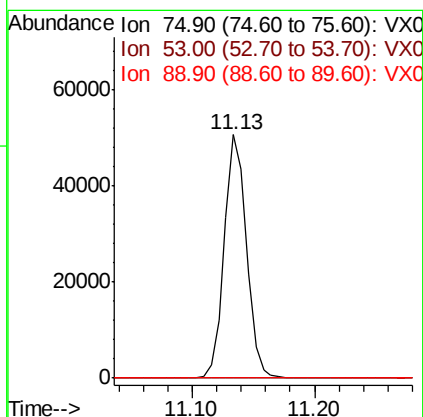
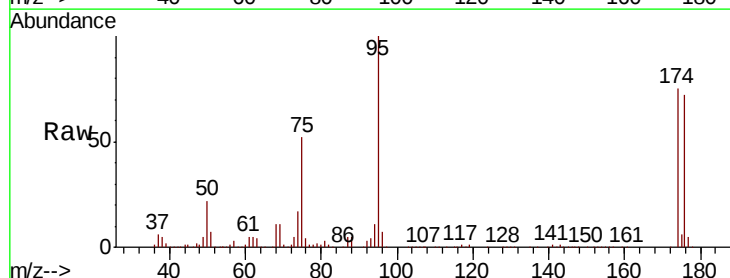
Tgt Ion: 75 Resp: 63664

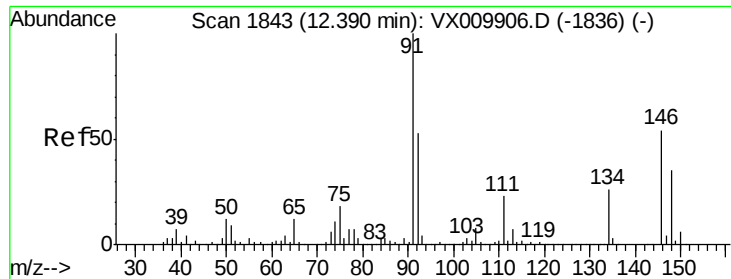
Ion Ratio Lower Upper

75 100

53 0.2 79.8 119.6#

89 0.1 34.2 51.4#





#91  
 1,2-Dichlorobenzene  
 Concen: 0.550 ug/l  
 RT: 12.39 min Scan# 1843  
 Delta R.T. 0.00 min  
 Lab File: VX009935.D  
 Acq: 29 May 2019 13:19

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF012MW001-190523

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 42.3  | 21.1  | 63.1  |
| 148     | 67.3  | 32.3  | 96.8  |

