

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX080119\  
 Data File : VX011284.D  
 Acq On : 02 Aug 2019 01:34  
 Operator : JC/SP  
 Sample : K4118-17  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-PZ138I1-20190731

Quant Time: Aug 02 02:11:16 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080119W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 02 01:55:00 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 134166   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 217254   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 202759   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 90188    | 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   | 71198    | 52.70 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.40% |          |
| 35) Dibromofluoromethane    | 5.49  | 113  | 69191    | 48.78 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.56%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 259699   | 48.51 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.02%  |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 83451    | 43.66 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.32%  |          |

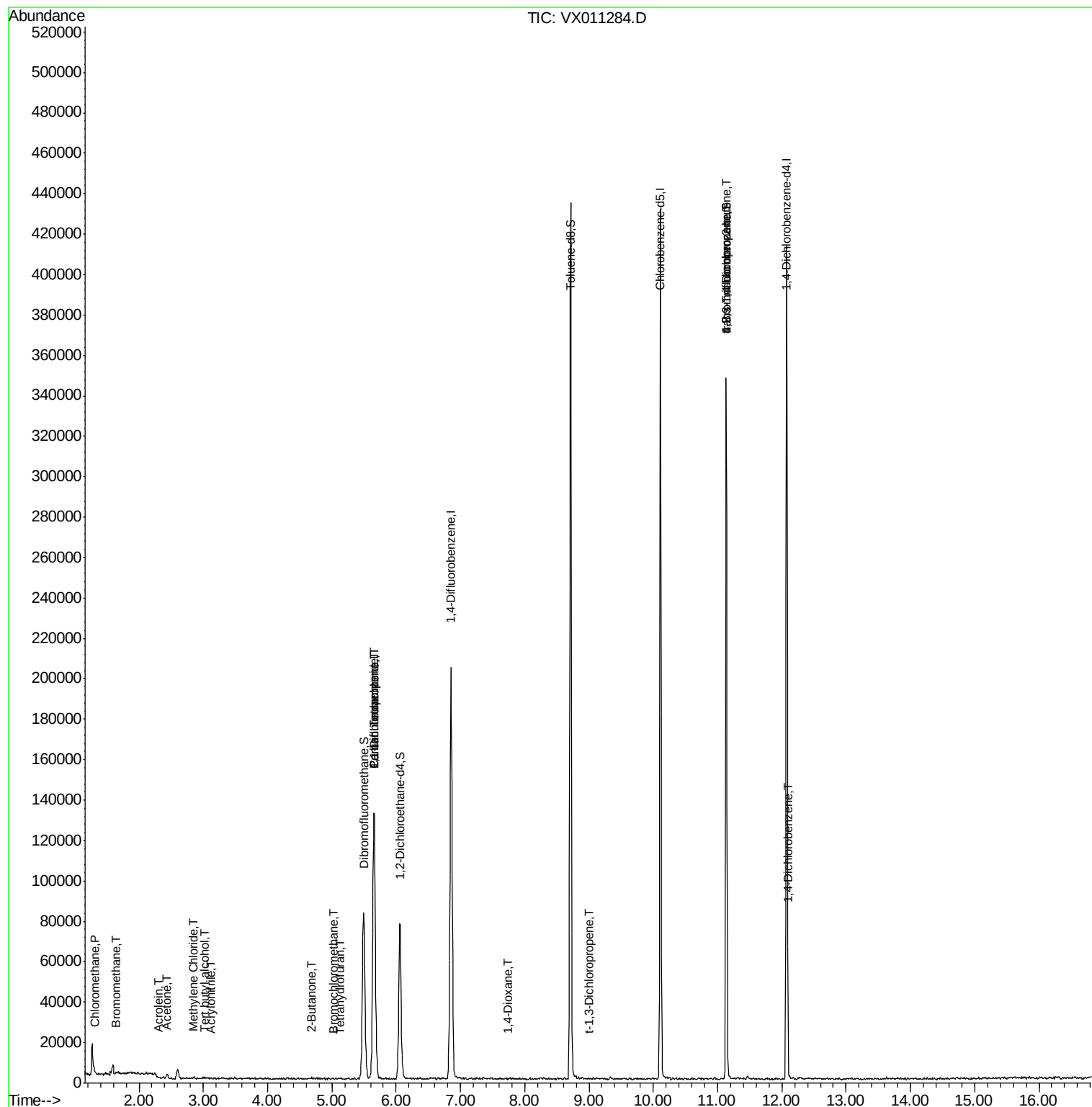
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 1.32  | 50   | 959      | 0.824     | ug/l # | 78     |
| 5) Bromomethane                | 1.64  | 94   | 458      | 0.502     | ug/l # | 67     |
| 6) Chloroethane                | 1.72  | 64   | 296      | Below Cal | #      | 43     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 322      | 1.218     | ug/l # | 72     |
| 13) Acrolein                   | 2.30  | 56   | 172      | 0.606     | ug/l # | 75     |
| 15) Acrylonitrile              | 3.13  | 53   | 192      | 0.299     | ug/l # | 1      |
| 16) Acetone                    | 2.43  | 43   | 2300     | 3.576     | ug/l   | 90     |
| 20) Methylene Chloride         | 2.85  | 84   | 476      | 0.338     | ug/l # | 81     |
| 25) 2-Butanone                 | 4.68  | 43   | 215      | 0.235     | ug/l # | 46     |
| 28) Bromochloromethane         | 5.03  | 49   | 251      | 0.261     | ug/l # | 4      |
| 29) Tetrahydrofuran            | 5.12  | 42   | 150      | 0.267     | ug/l # | 29     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 8744     | 4.610     | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 12586    | 6.595     | ug/l # | 14     |
| 49) 1,4-Dioxane                | 7.74  | 88   | 20       | 0.482     | ug/l # | 1      |
| 53) t-1,3-Dichloropropene      | 9.00  | 75   | 40       | 2.856     | ug/l # | 43     |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 41202    | 25.086    | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 41202    | 65.448    | ug/l # | 10     |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 693      | 0.222     | ug/l # | 1      |

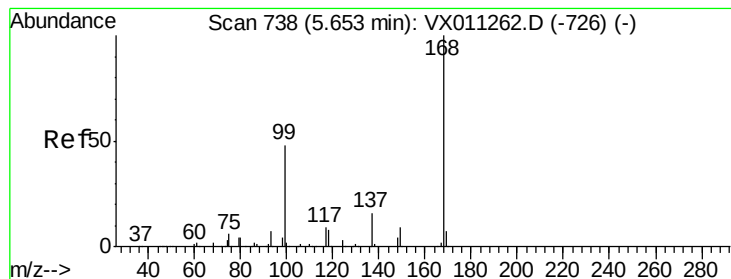
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX080119\  
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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X080119W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 02 01:55:00 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: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

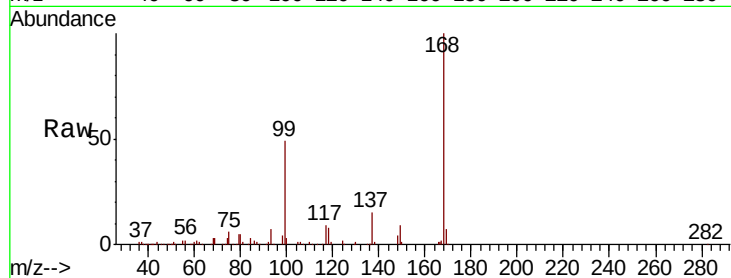
SA-PZ138I1-20190731

Tot Ion:168 Resp: 134166

Ion Ratio Lower Upper

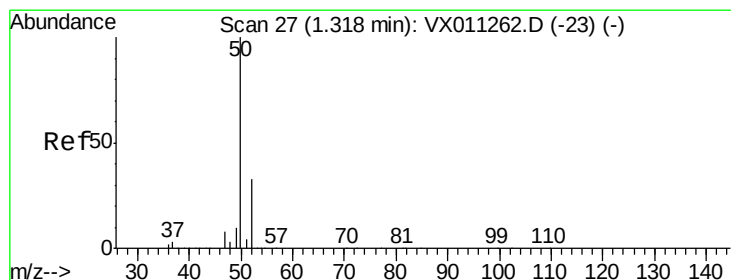
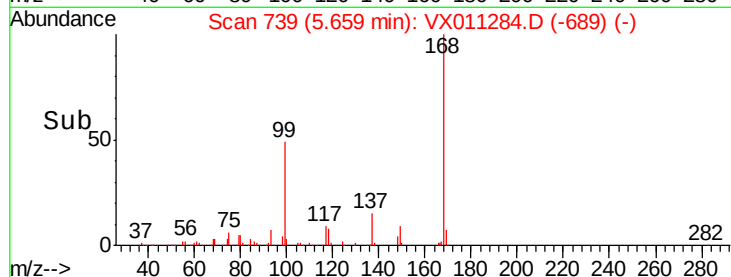
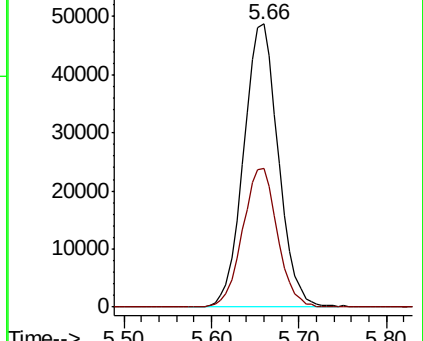
168 100

99 49.0 38.5 57.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#3

Chloromethane

Concen: 0.824 ug/l

RT: 1.32 min Scan# 27

Delta R.T. 0.00 min

Lab File: VX011284.D

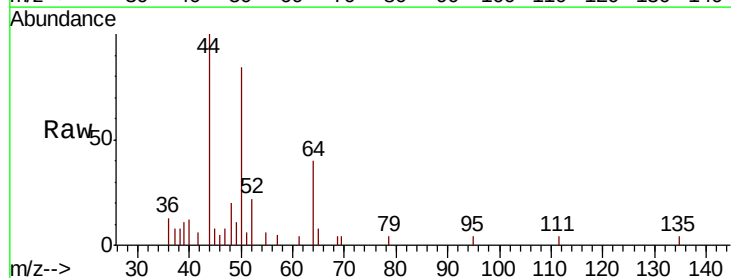
Acq: 02 Aug 2019 01:34

Tgt Ion: 50 Resp: 959

Ion Ratio Lower Upper

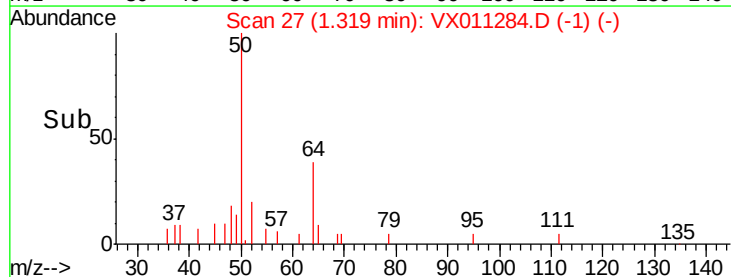
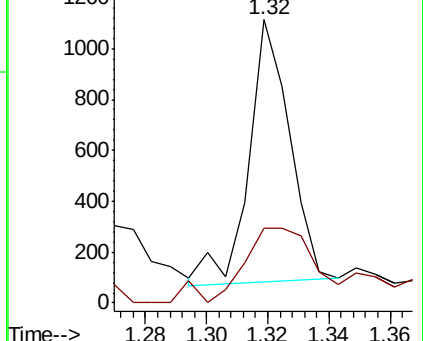
50 100

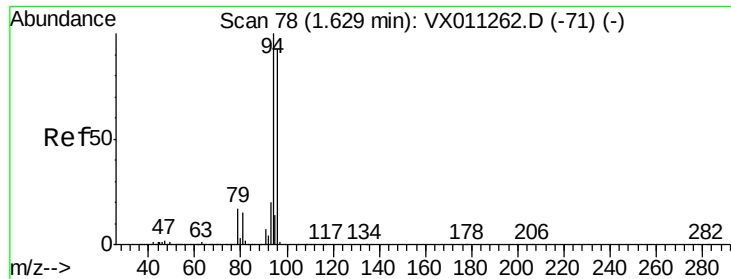
52 20.3 26.4 39.6#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0





#5

Bromomethane

Concen: 0.502 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

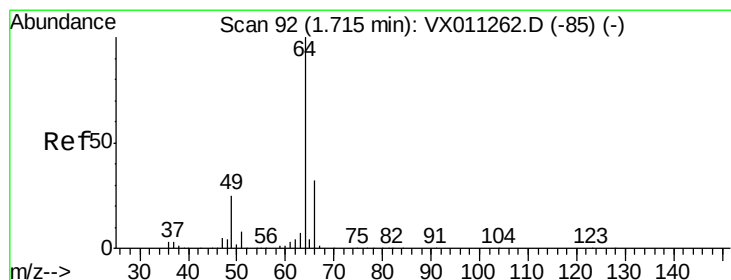
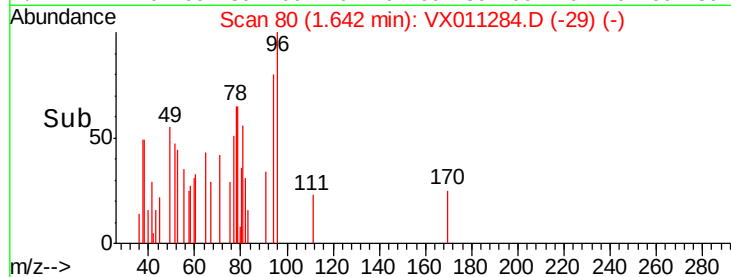
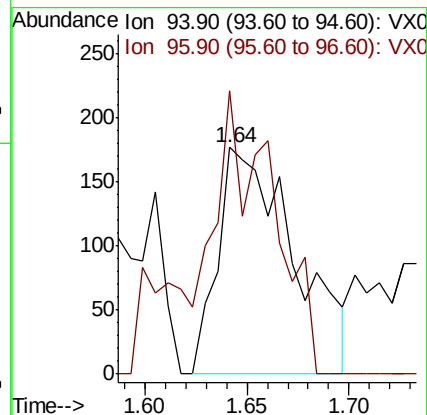
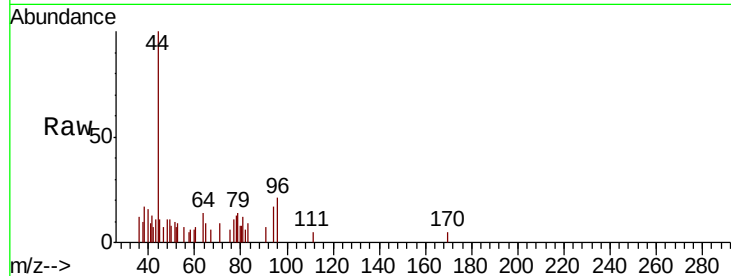
SA-PZ13811-20190731

Tot Ion: 94 Resp: 458

Ion Ratio Lower Upper

94 100

96 124.9 74.6 112.0#



#6

Chloroethane

Concen: Below Cal

RT: 1.72 min Scan# 93

Delta R.T. 0.01 min

Lab File: VX011284.D

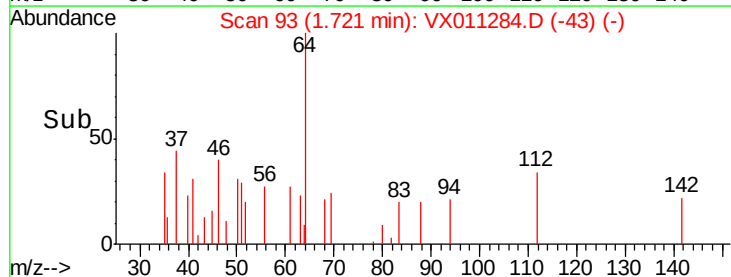
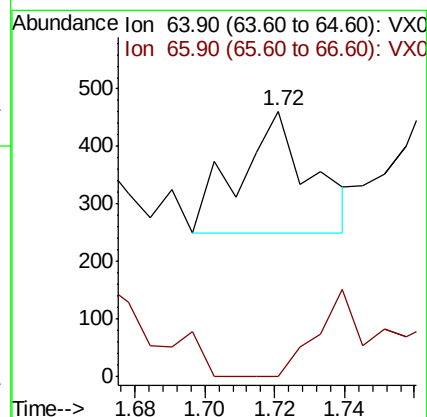
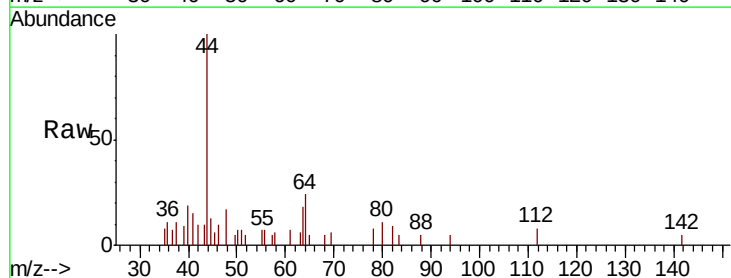
Acq: 02 Aug 2019 01:34

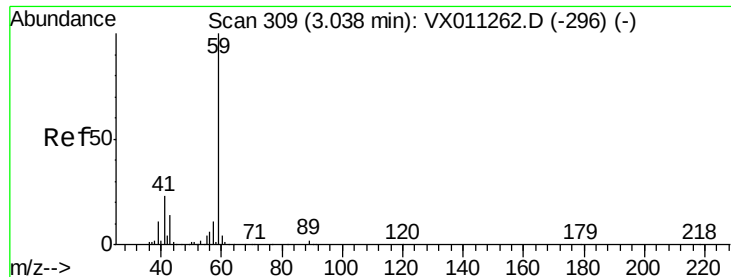
Tgt Ion: 64 Resp: 296

Ion Ratio Lower Upper

64 100

66 0.0 25.1 37.7#



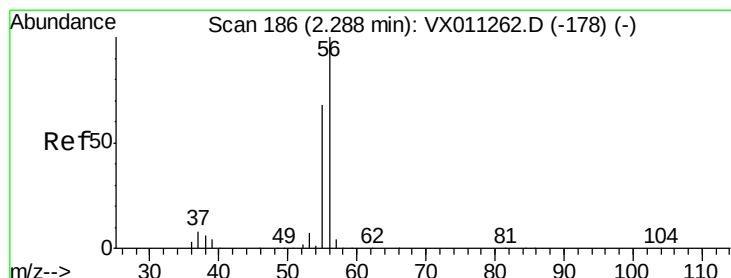
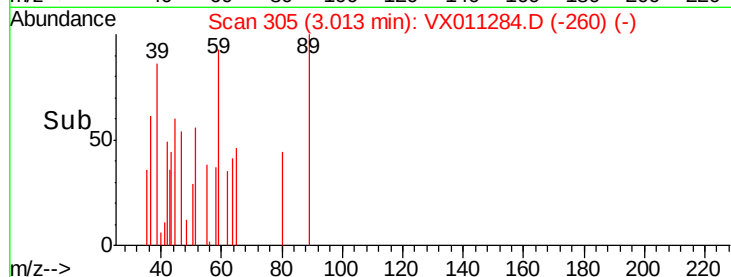
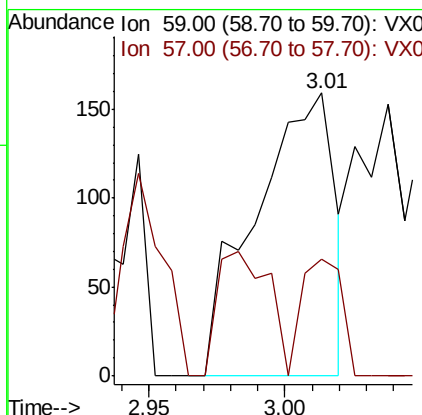
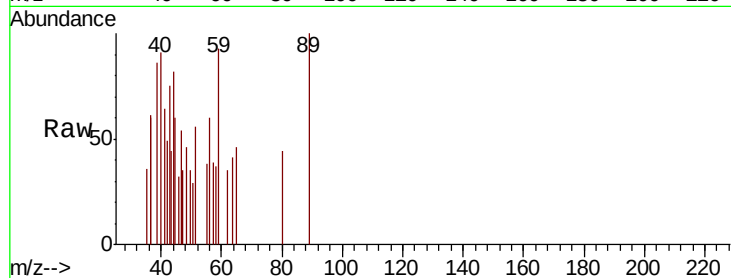


#11

Tert butyl alcohol  
 Concen: 1.218 ug/l  
 RT: 3.01 min Scan# 305  
 Delta R.T. -0.02 min  
 Lab File: VX011284.D  
 Acq: 02 Aug 2019 01:34

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SA-PZ138I1-20190731

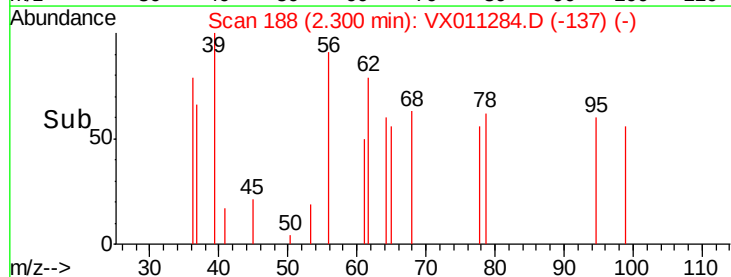
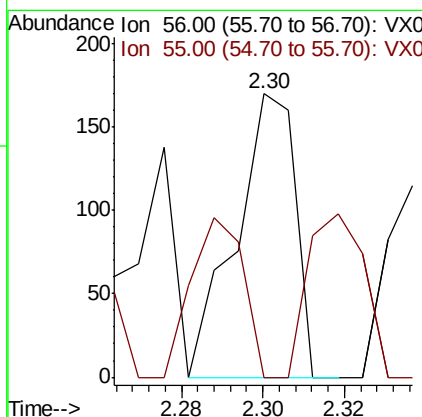
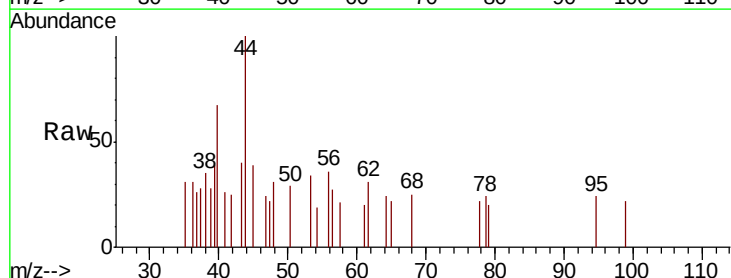
Tot Ion: 59 Resp: 322  
 Ion Ratio Lower Upper  
 59 100  
 57 20.8 8.3 12.5#

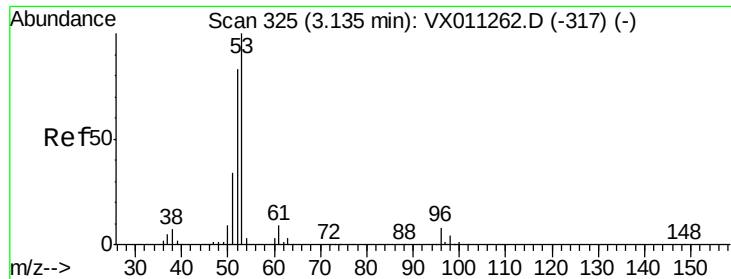


#13

Acrolein  
 Concen: 0.606 ug/l  
 RT: 2.30 min Scan# 188  
 Delta R.T. 0.01 min  
 Lab File: VX011284.D  
 Acq: 02 Aug 2019 01:34

Tgt Ion: 56 Resp: 172  
 Ion Ratio Lower Upper  
 56 100  
 55 49.4 56.0 84.0#





#15

Acrylonitrile

Concen: 0.299 ug/l

RT: 3.13 min Scan# 324

Delta R.T. -0.01 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

SA-PZ138I1-20190731

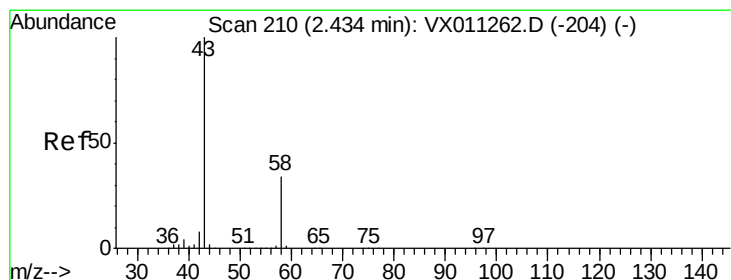
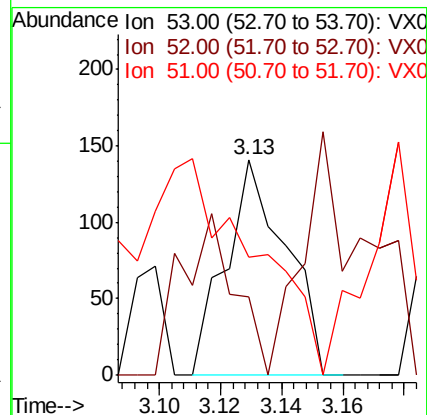
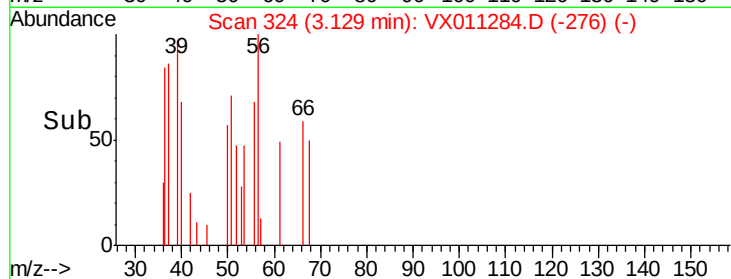
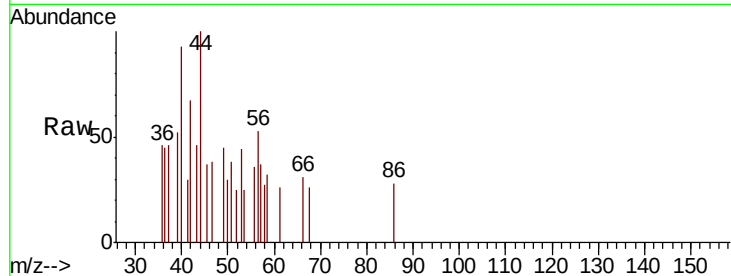
Tot Ion: 53 Resp: 192

Ion Ratio Lower Upper

53 100

52 66.7 65.5 98.3

51 229.2 27.9 41.9#



#16

Acetone

Concen: 3.576 ug/l

RT: 2.43 min Scan# 210

Delta R.T. 0.00 min

Lab File: VX011284.D

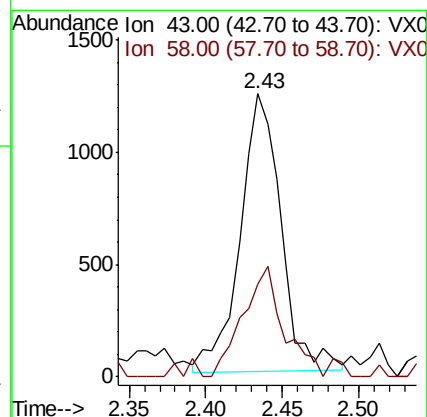
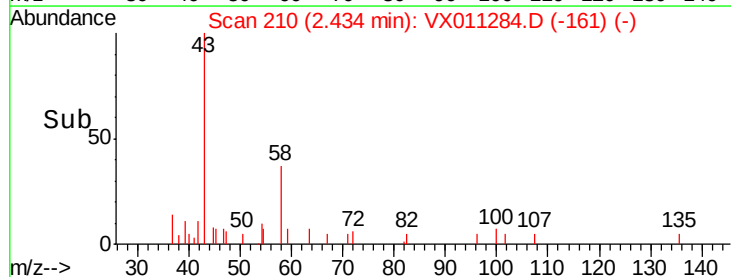
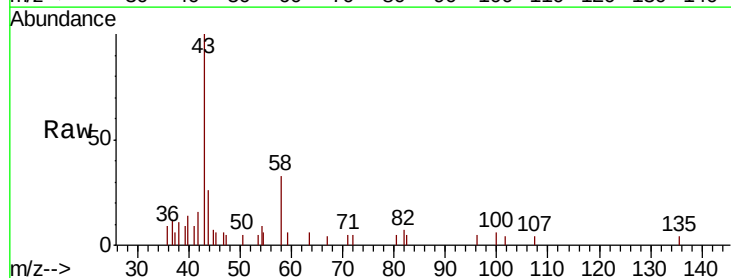
Acq: 02 Aug 2019 01:34

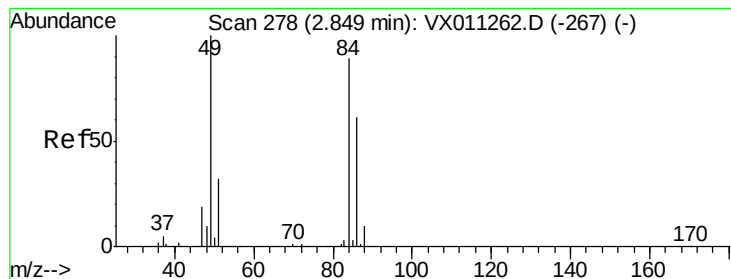
Tgt Ion: 43 Resp: 2300

Ion Ratio Lower Upper

43 100

58 28.7 27.4 41.0





#20

Methvlene Chloride

Concen: 0.338 ug/l

RT: 2.85 min Scan# 278

Delta R.T. 0.00 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

SA-PZ138I1-20190731

Tot Ion: 84 Resp: 476

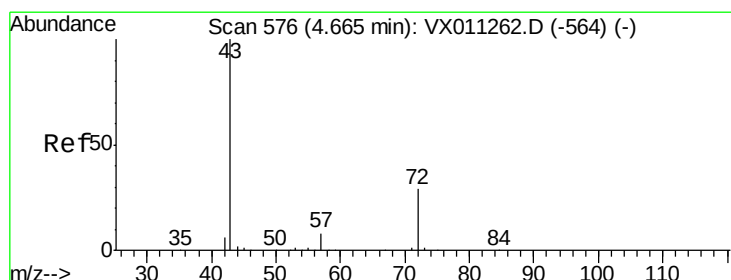
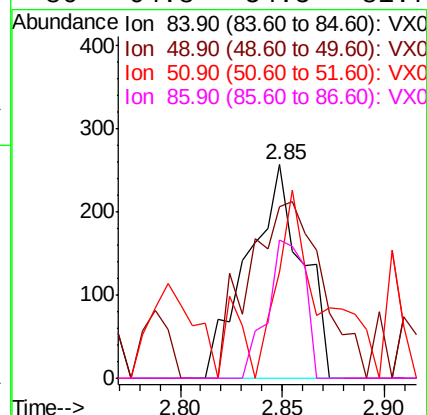
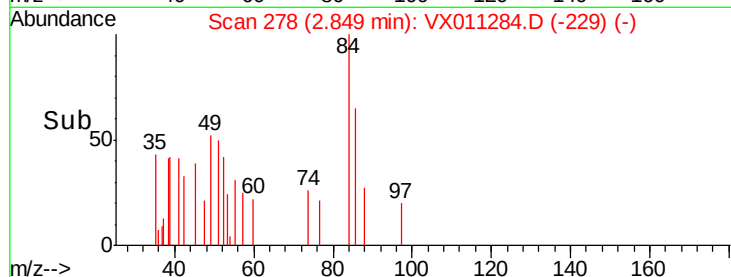
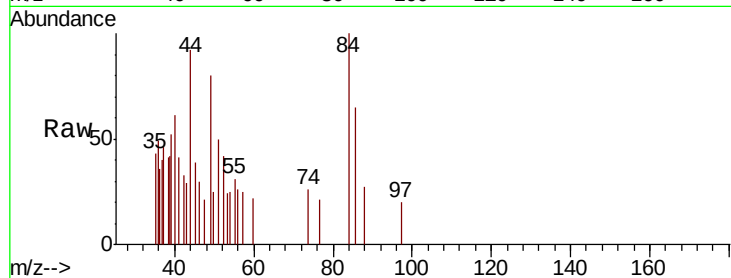
Ion Ratio Lower Upper

84 100

49 80.5 89.3 133.9#

51 25.4 28.3 42.5#

86 64.8 54.5 81.7



#25

2-Butanone

Concen: 0.235 ug/l

RT: 4.68 min Scan# 579

Delta R.T. 0.02 min

Lab File: VX011284.D

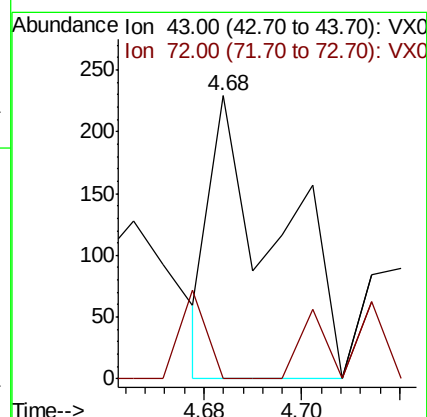
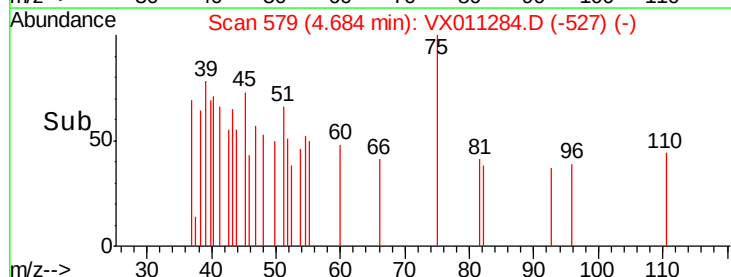
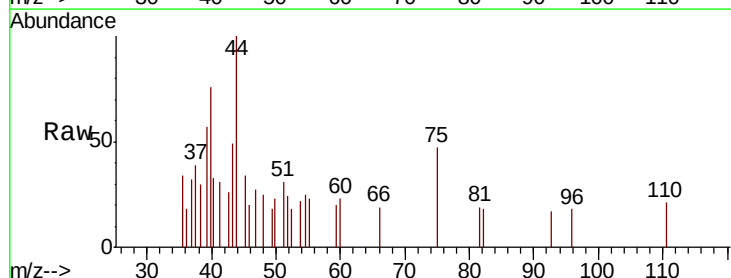
Acq: 02 Aug 2019 01:34

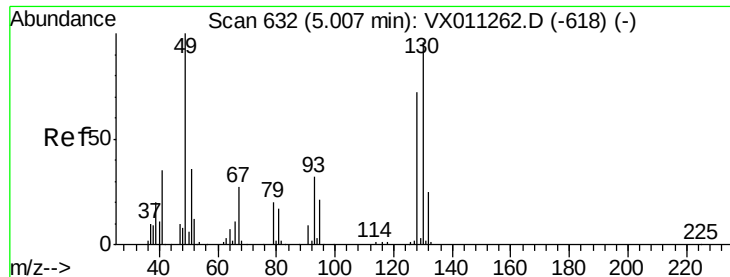
Tgt Ion: 43 Resp: 215

Ion Ratio Lower Upper

43 100

72 0.0 23.2 34.8#





#28

Bromochloromethane

Concen: 0.261 ug/l

RT: 5.03 min Scan# 635

Delta R.T. 0.02 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

SA-PZ13811-20190731

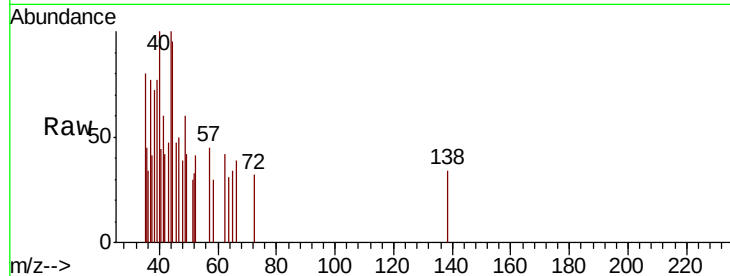
Tot Ion: 49 Resp: 251

Ion Ratio Lower Upper

49 100

129 0.0 0.0 5.8

130 0.0 77.9 116.9#



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

5.03

200

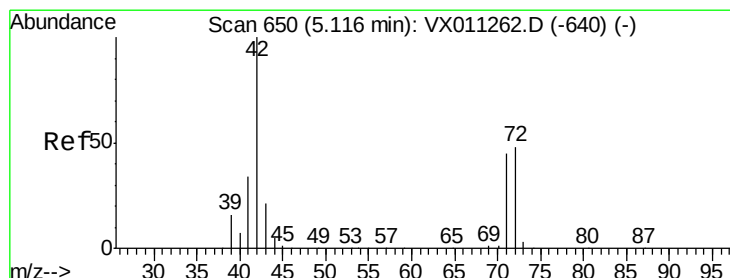
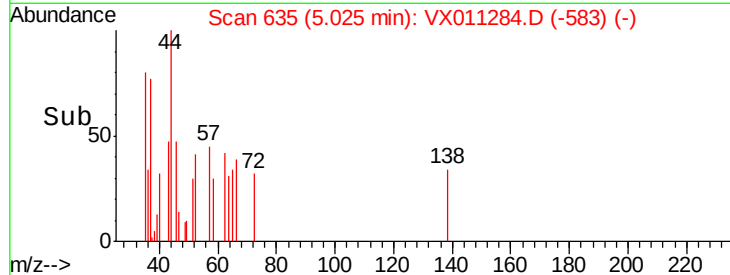
150

100

50

0

Time-->



#29

Tetrahydrofuran

Concen: 0.267 ug/l

RT: 5.12 min Scan# 650

Delta R.T. 0.00 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

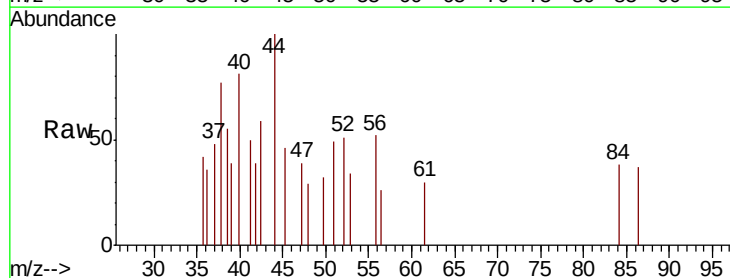
Tgt Ion: 42 Resp: 150

Ion Ratio Lower Upper

42 100

72 0.0 39.9 59.9#

71 0.0 36.9 55.3#



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

5.12

250

200

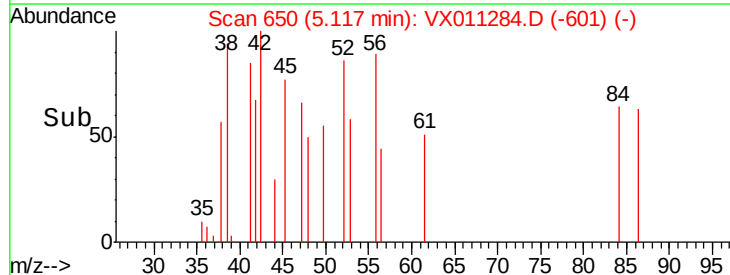
150

100

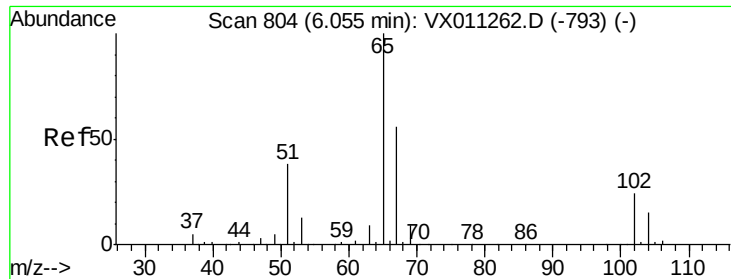
50

0

Time-->



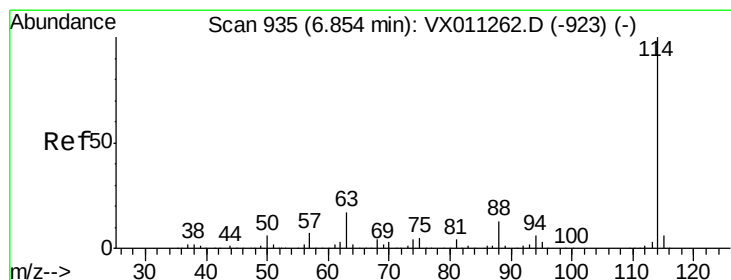
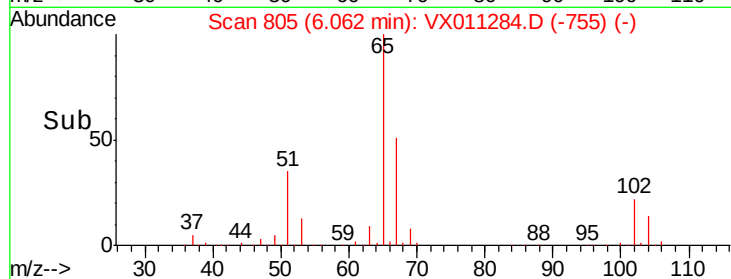
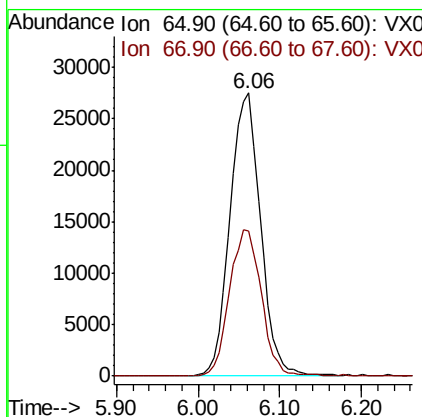
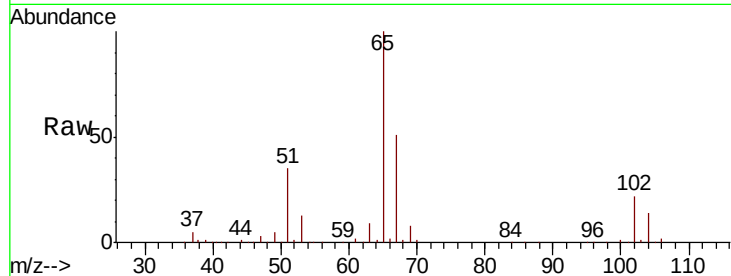




#33  
 1,2-Dichloroethane-d4  
 Concen: 52.695 ug/l  
 RT: 6.06 min Scan# 805  
 Delta R.T. 0.01 min  
 Lab File: VX011284.D  
 Acq: 02 Aug 2019 01:34

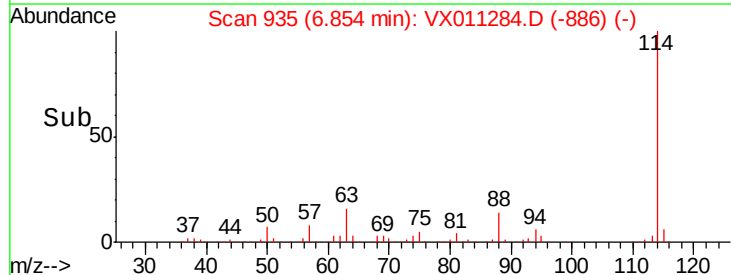
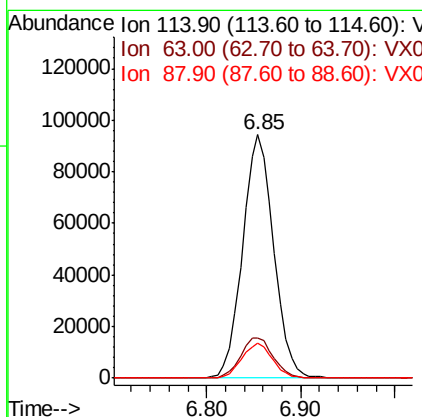
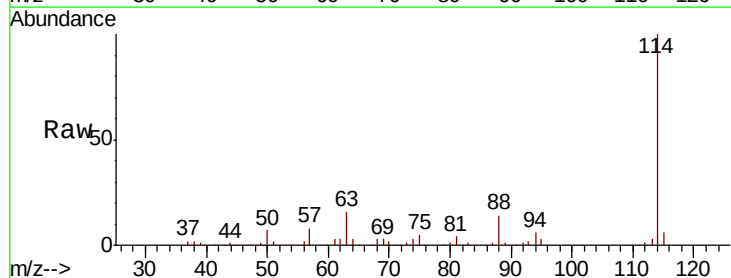
Instrument :  
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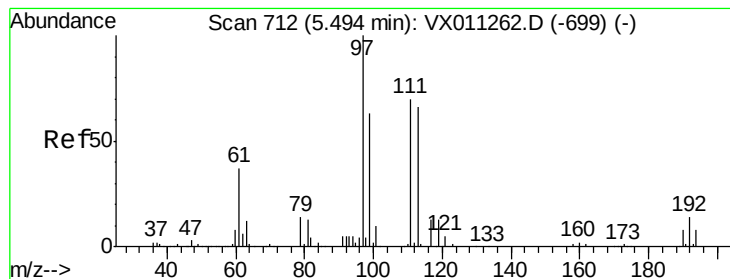
Tot Ion: 65 Resp: 71198  
 Ion Ratio Lower Upper  
 65 100  
 67 53.8 0.0 110.6



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 935  
 Delta R.T. 0.00 min  
 Lab File: VX011284.D  
 Acq: 02 Aug 2019 01:34

Tgt Ion: 114 Resp: 217254  
 Ion Ratio Lower Upper  
 114 100  
 63 16.3 0.0 34.0  
 88 14.3 0.0 26.4





#35

Dibromofluoromethane

Concen: 48.781 ug/l

RT: 5.49 min Scan# 711

Delta R.T. -0.01 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

SA-PZ138I1-20190731

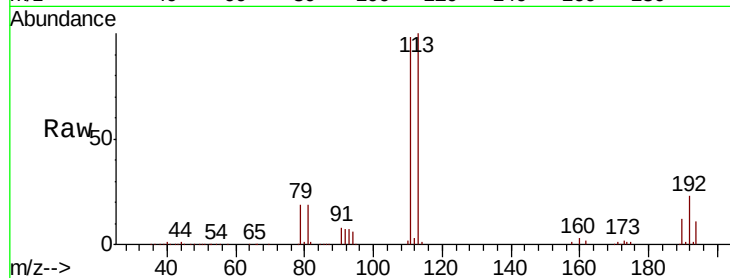
Tot Ion:113 Resp: 69191

Ion Ratio Lower Upper

113 100

111 101.1 81.9 122.9

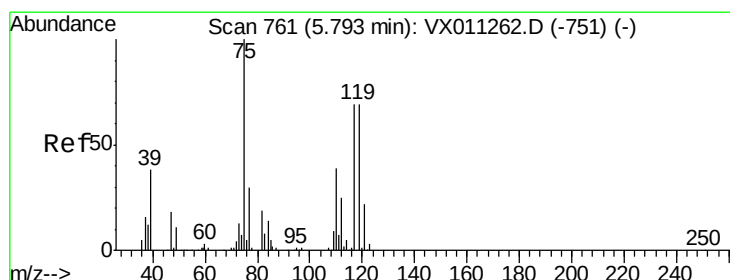
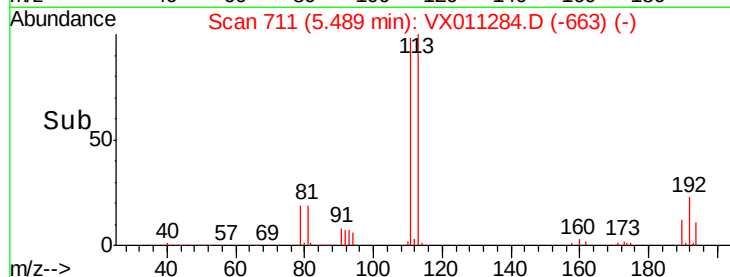
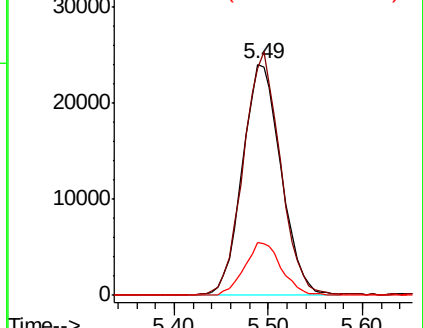
192 21.8 17.8 26.8



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: 4.610 ug/l

RT: 5.65 min Scan# 738

Delta R.T. -0.14 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

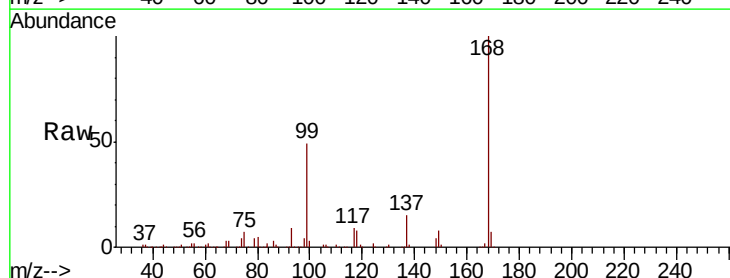
Tgt Ion: 75 Resp: 8744

Ion Ratio Lower Upper

75 100

110 10.6 20.0 59.9#

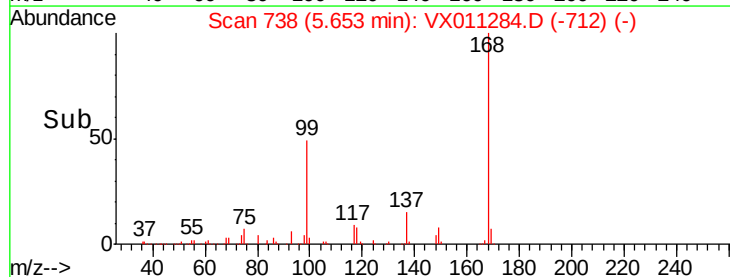
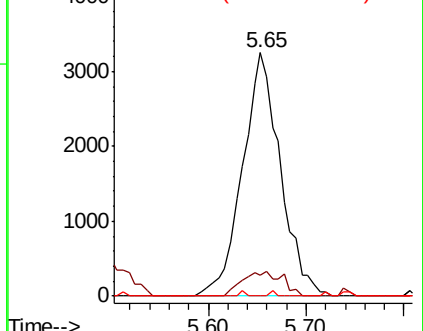
77 0.3 24.8 37.2#

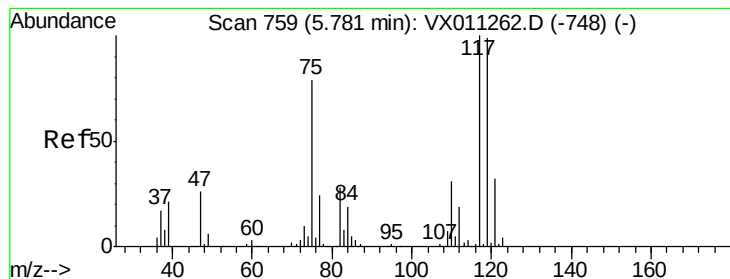


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.595 ug/l

RT: 5.65 min Scan# 737

Delta R.T. -0.13 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

SA-PZ13811-20190731

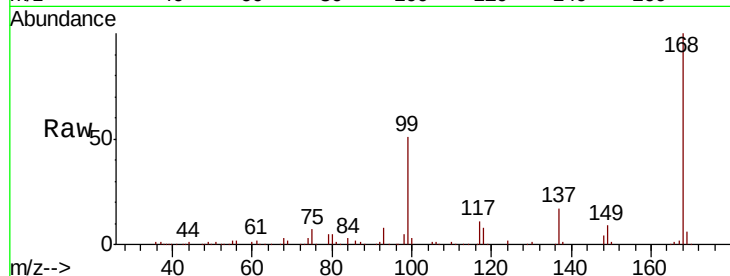
Tot Ion:117 Resp: 12586

Ion Ratio Lower Upper

117 100

119 4.2 79.0 118.4#

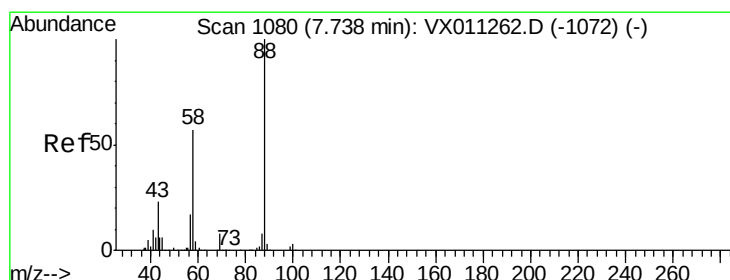
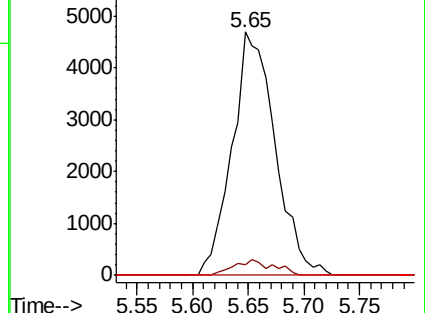
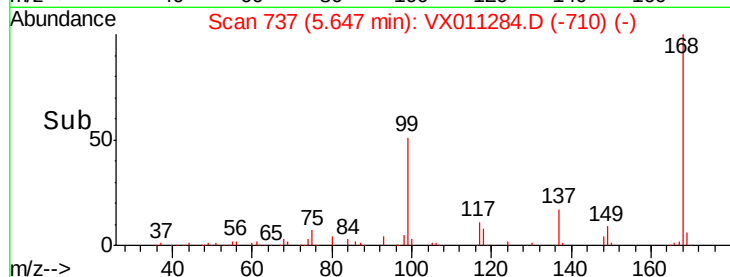
121 0.0 25.9 38.9#



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: 0.482 ug/l

RT: 7.74 min Scan# 1081

Delta R.T. 0.01 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

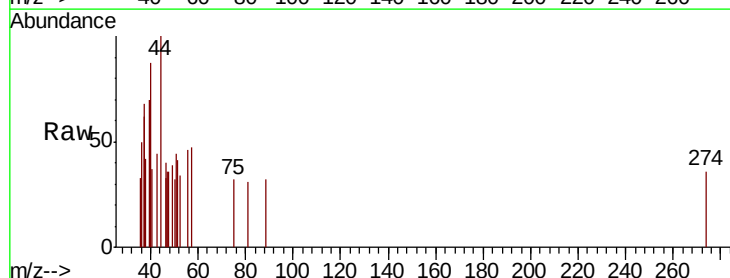
Tgt Ion: 88 Resp: 20

Ion Ratio Lower Upper

88 100

43 695.0 22.2 33.2#

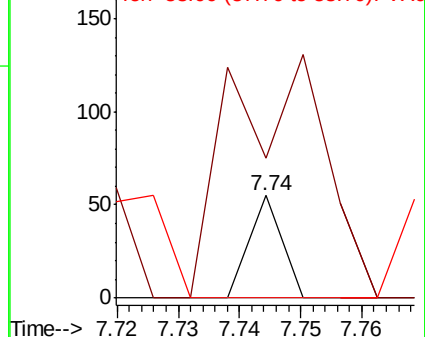
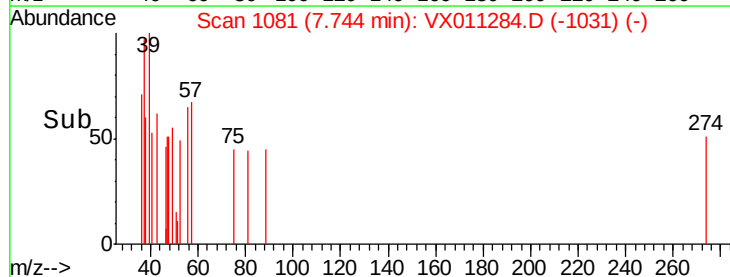
58 0.0 47.8 71.8#

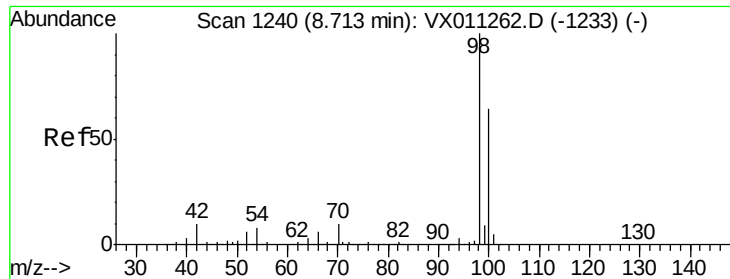


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#50

Toluene-d8

Concen: 48.505 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

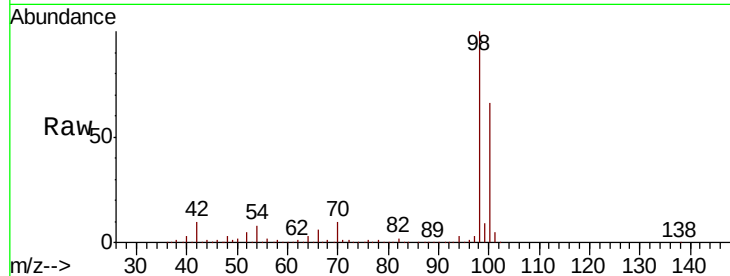
SA-PZ138I1-20190731

Tot Ion: 98 Resp: 259699

Ion Ratio Lower Upper

98 100

100 64.5 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX

200000

150000

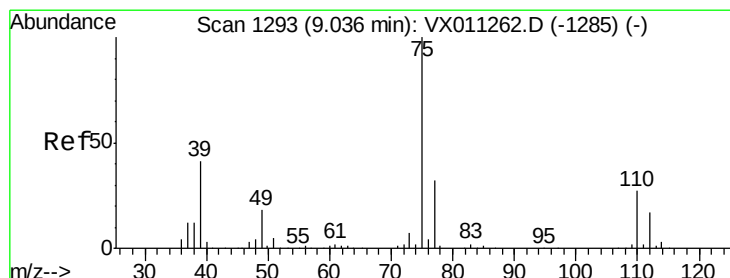
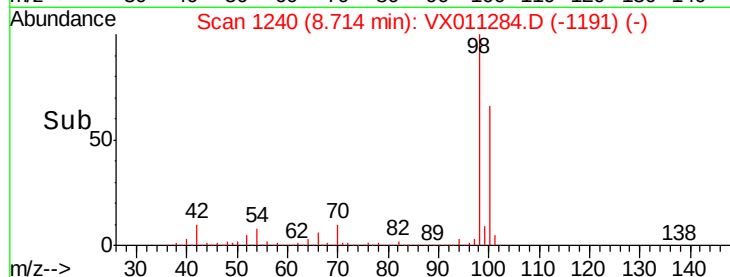
100000

50000

0

8.65 8.70 8.75 8.80

Time-->



#53

t-1,3-Dichloropropene

Concen: 2.856 ug/l

RT: 9.00 min Scan# 1287

Delta R.T. -0.04 min

Lab File: VX011284.D

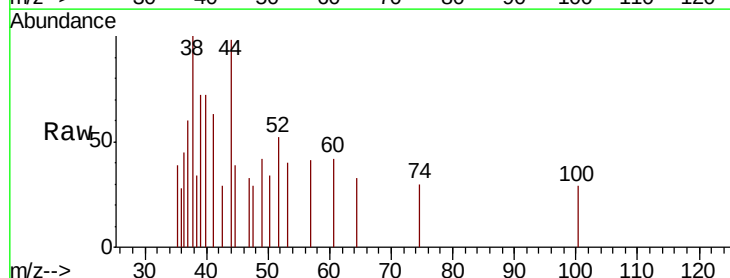
Acq: 02 Aug 2019 01:34

Tgt Ion: 75 Resp: 40

Ion Ratio Lower Upper

75 100

77 0.0 25.4 38.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0

80

60

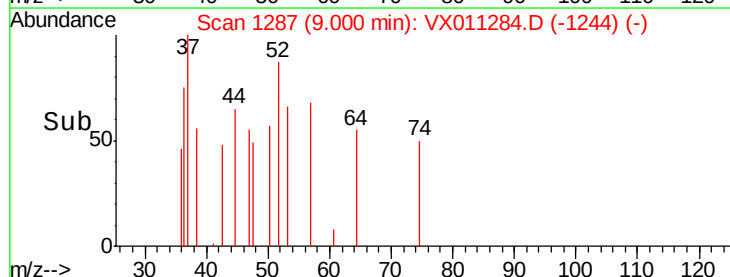
40

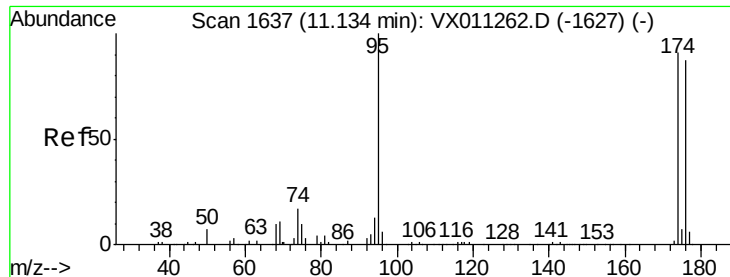
20

0

8.99 9.00 9.01 9.02

Time-->

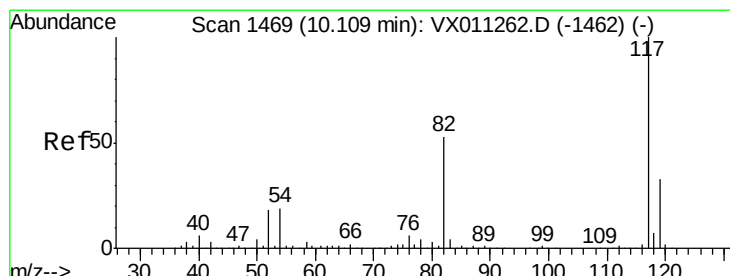
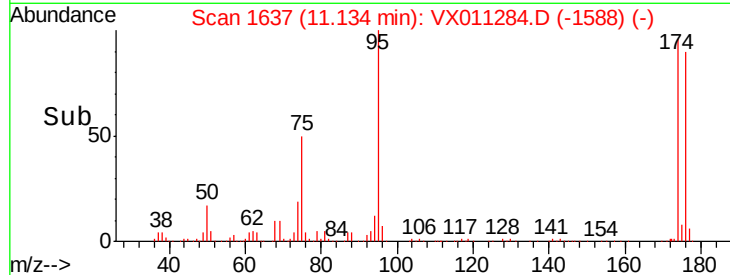
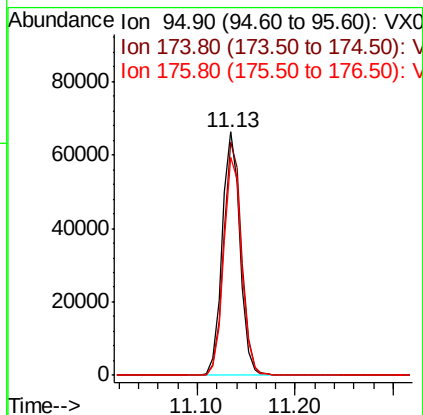
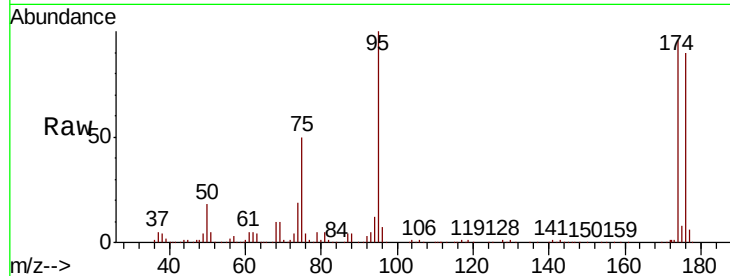




#62  
4-Bromofluorobenzene  
Concen: 43.656 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. 0.00 min  
Lab File: VX011284.D  
Acq: 02 Aug 2019 01:34

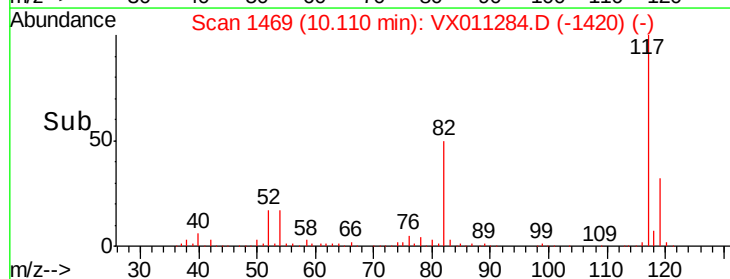
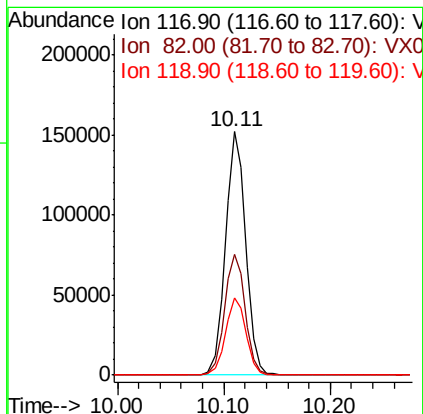
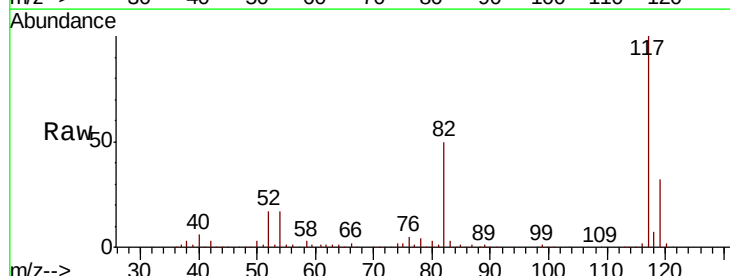
Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-PZ138I1-20190731

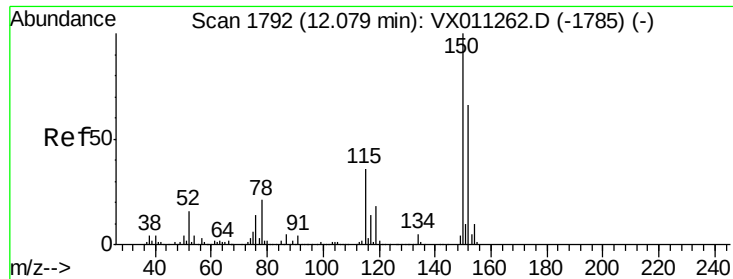
Tot Ion: 95 Resp: 83451  
Ion Ratio Lower Upper  
95 100  
174 97.2 0.0 191.2  
176 91.0 0.0 184.8



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1469  
Delta R.T. 0.00 min  
Lab File: VX011284.D  
Acq: 02 Aug 2019 01:34

Tgt Ion: 117 Resp: 202759  
Ion Ratio Lower Upper  
117 100  
82 49.6 42.2 63.2  
119 31.7 26.6 39.8





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.08 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX011284.D

Acq: 02 Aug 2019 01:34

Instrument :

MSVOA\_X

ClientSampleId :

SA-PZ13811-20190731

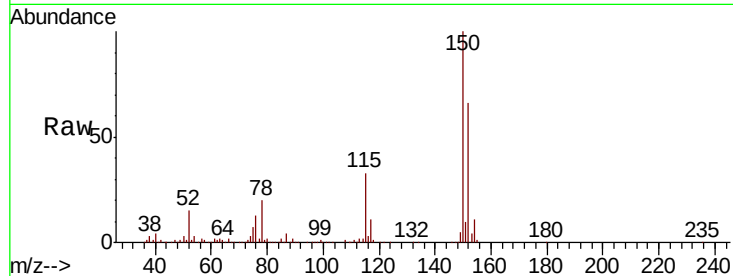
Tot Ion:152 Resp: 90188

Ion Ratio Lower Upper

152 100

115 54.1 40.0 119.9

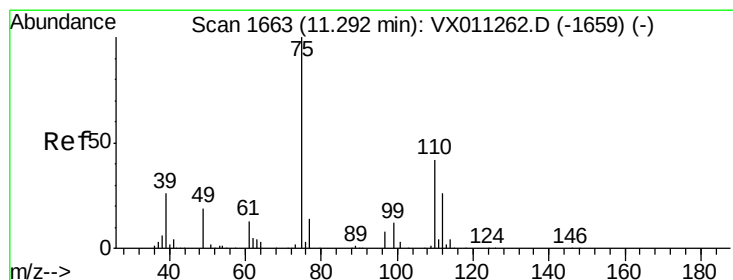
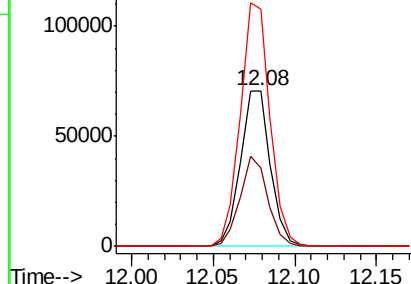
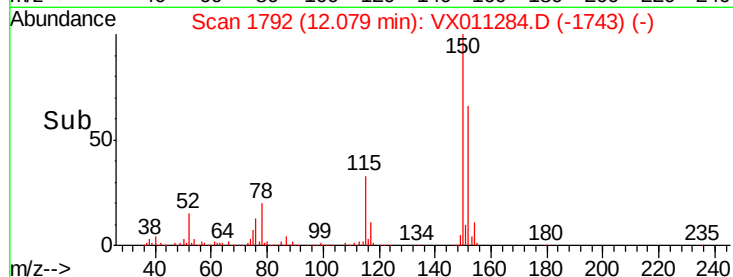
150 155.8 0.0 350.4



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: 25.086 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX011284.D

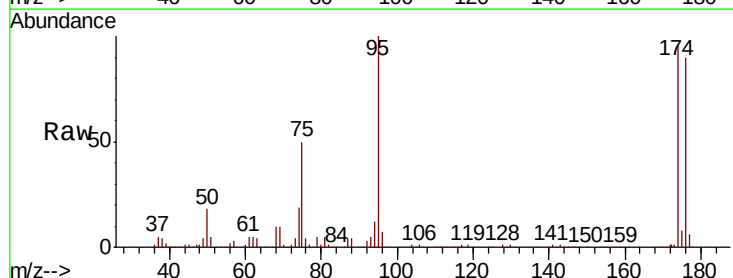
Acq: 02 Aug 2019 01:34

Tgt Ion: 75 Resp: 41202

Ion Ratio Lower Upper

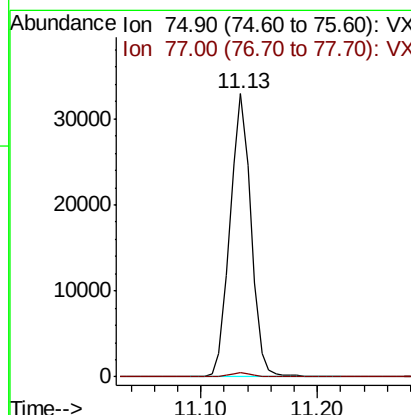
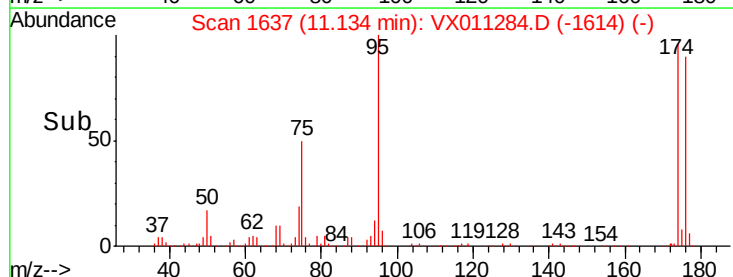
75 100

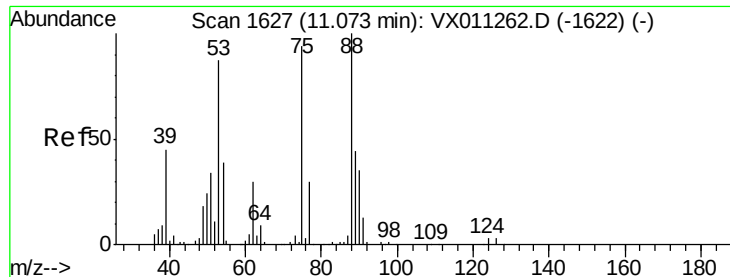
77 1.6 21.1 63.4#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

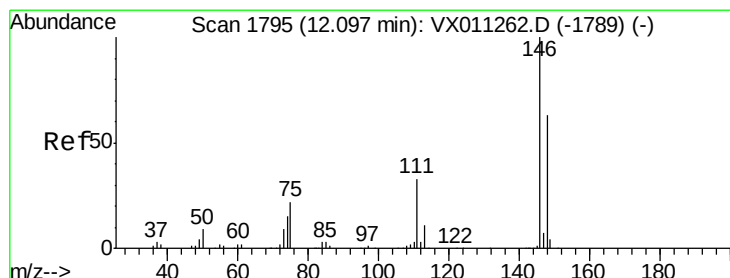
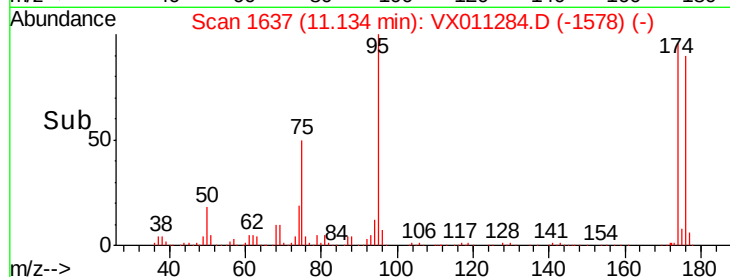
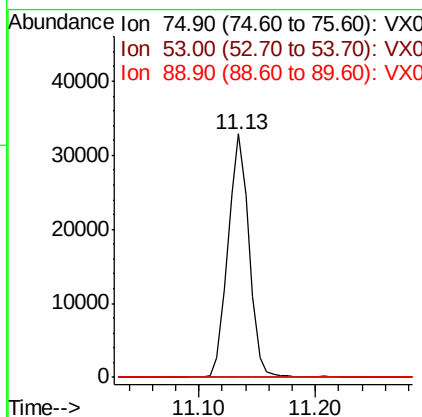
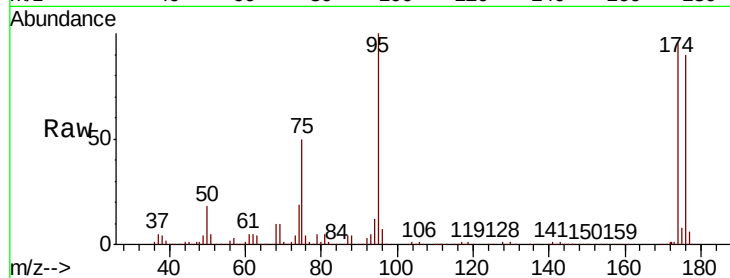




#81  
trans-1,4-Dichloro-2-butene  
Concen: 65.448 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. 0.06 min  
Lab File: VX011284.D  
Acq: 02 Aug 2019 01:34

Instrument :  
MSVOA\_X  
ClientSampleId :  
SA-PZ13811-20190731

Tot Ion: 75 Resp: 41202  
Ion Ratio Lower Upper  
75 100  
53 0.3 78.2 117.4#  
89 0.1 37.9 56.9#



#88  
1,4-Dichlorobenzene  
Concen: 0.222 ug/l  
RT: 12.10 min Scan# 1795  
Delta R.T. 0.00 min  
Lab File: VX011284.D  
Acq: 02 Aug 2019 01:34

Tgt Ion: 146 Resp: 693  
Ion Ratio Lower Upper  
146 100  
111 200.7 17.8 53.4#  
148 129.0 31.8 95.3#

