

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX073019\  
 Data File : VX011198.D  
 Acq On : 30 Jul 2019 16:30  
 Operator : JC/SP  
 Sample : K4026-04  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-ER-2019-2

Quant Time: Jul 31 08:39:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 24 05:39:23 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 218946   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 308408   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 269066   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 125373   | 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   | 105534   | 45.31 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.62% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 92290    | 47.15 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.30% |          |
| 50) Toluene-d8              | 8.71  | 98   | 357098   | 48.64 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.28% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 115680   | 42.87 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.74% |          |

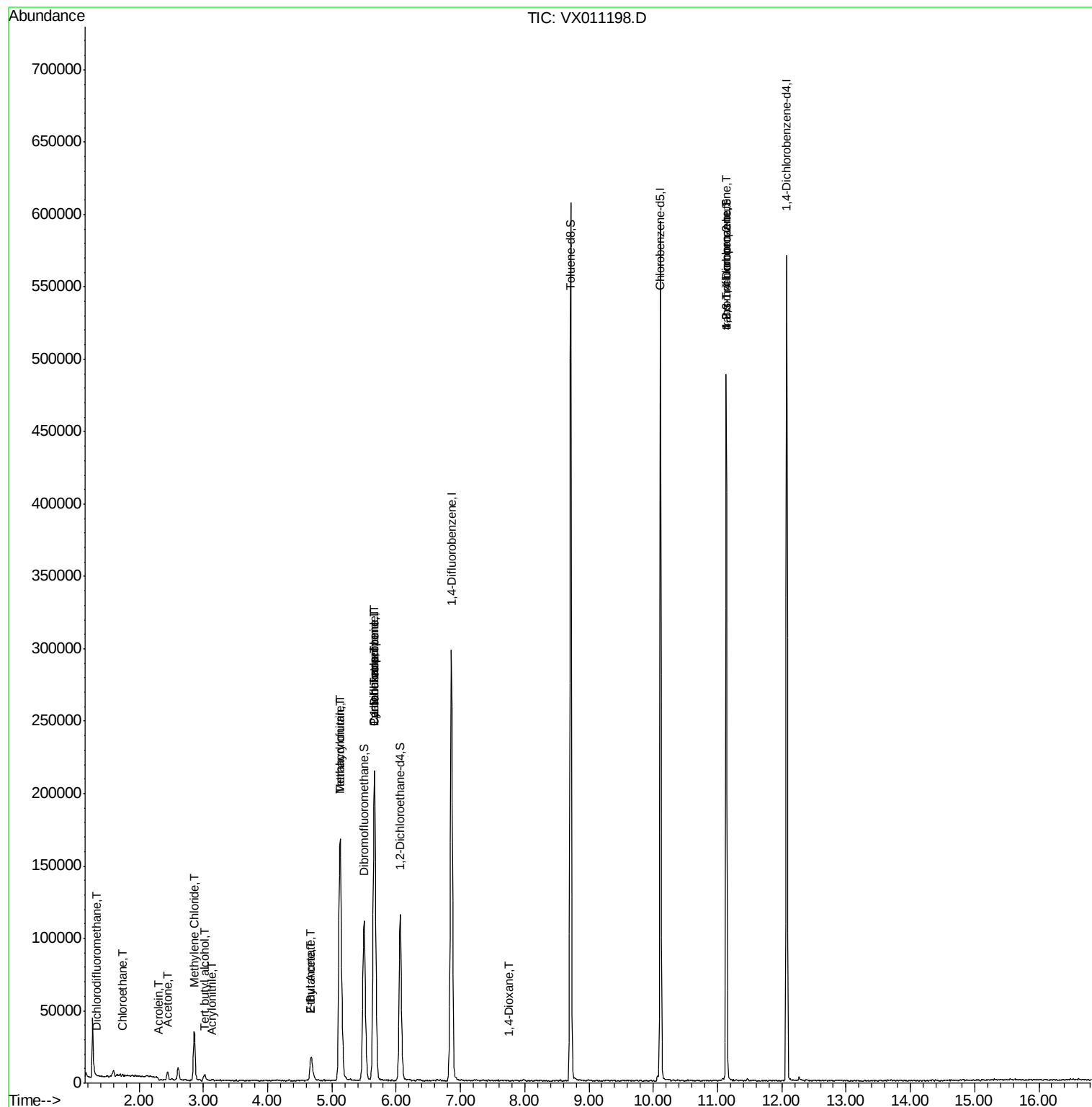
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.34  | 85   | 22       | 0.556   | ug/l # | 43     |
| 6) Chloroethane                | 1.73  | 64   | 282      | 0.216   | ug/l # | 41     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 2755     | 5.079   | ug/l # | 87     |
| 13) Acrolein                   | 2.31  | 56   | 190      | 0.606   | ug/l # | 15     |
| 15) Acrylonitrile              | 3.14  | 53   | 229      | 0.209   | ug/l # | 77     |
| 16) Acetone                    | 2.45  | 43   | 6294     | 5.983   | ug/l   | 94     |
| 20) Methylene Chloride         | 2.86  | 84   | 16678    | 7.481   | ug/l   | 97     |
| 25) 2-Butanone                 | 4.67  | 43   | 27003    | 17.881  | ug/l   | 96     |
| 29) Tetrahydrofuran            | 5.13  | 42   | 150968   | 157.820 | ug/l   | 97     |
| 31) Cyclohexane                | 5.66  | 56   | 4204     | 1.329   | ug/l # | 8      |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 14026    | 5.537   | ug/l # | 49     |
| 37) Ethyl Acetate              | 4.67  | 43   | 27003    | 10.410  | ug/l # | 68     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 20169    | 7.640   | ug/l # | 17     |
| 41) Methacrylonitrile          | 5.12  | 41   | 85468    | 58.040  | ug/l # | 42     |
| 49) 1,4-Dioxane                | 7.75  | 88   | 27       | 0.465   | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 58887    | 26.028  | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 58887    | 64.675  | ug/l # | 11     |

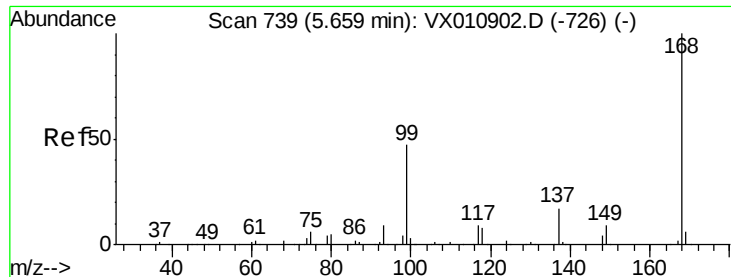
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX073019\  
Data File : VX011198.D  
Acq On : 30 Jul 2019 16:30  
Operator : JC/SP  
Sample : K4026-04  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-ER-2019-2

Quant Time: Jul 31 08:39:42 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jul 24 05:39:23 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: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

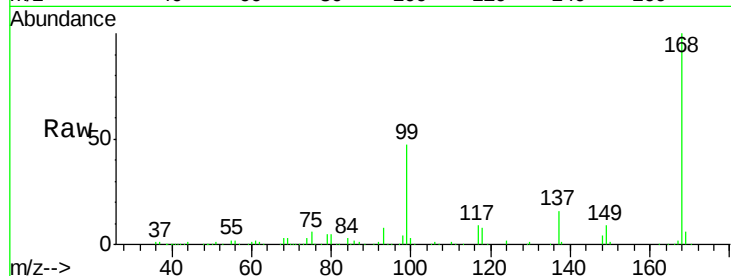
Z3-ER-2019-2

Tgt Ion:168 Resp: 218946

Ion Ratio Lower Upper

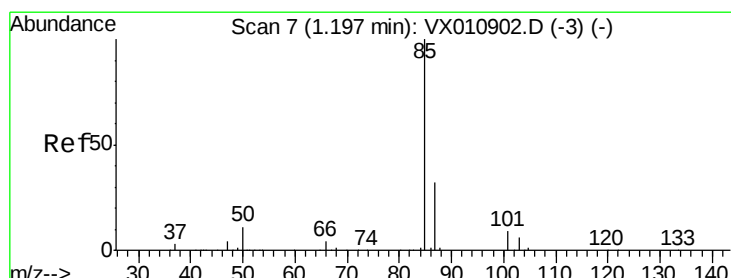
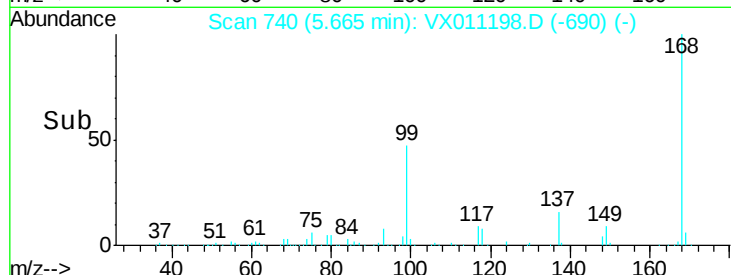
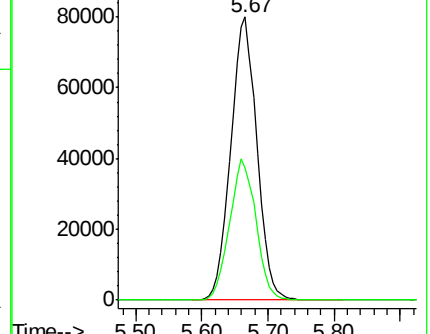
168 100

99 46.7 37.6 56.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#2

Dichlorodifluoromethane

Concen: 0.556 ug/l

RT: 1.34 min Scan# 30

Delta R.T. 0.14 min

Lab File: VX011198.D

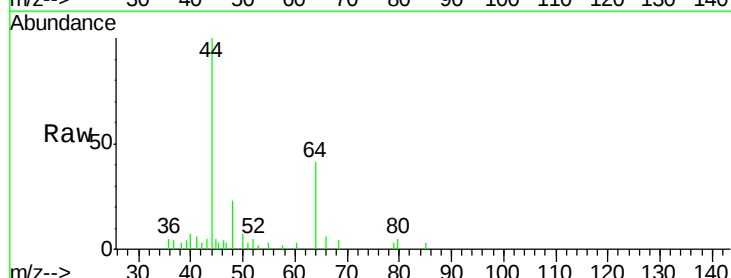
Acq: 30 Jul 2019 16:30

Tgt Ion: 85 Resp: 22

Ion Ratio Lower Upper

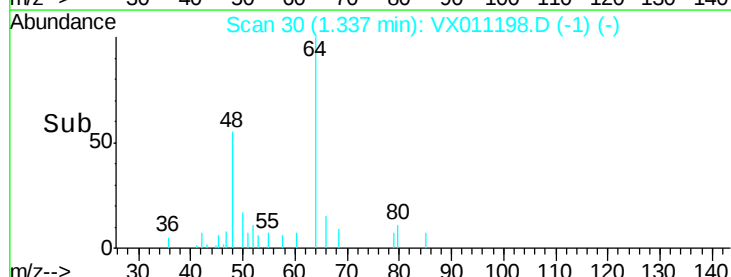
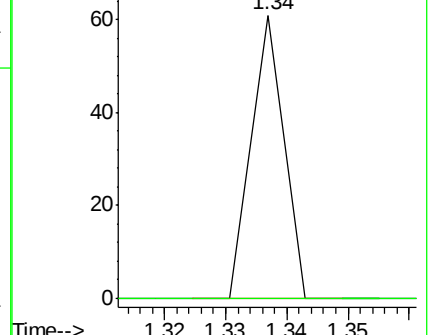
85 100

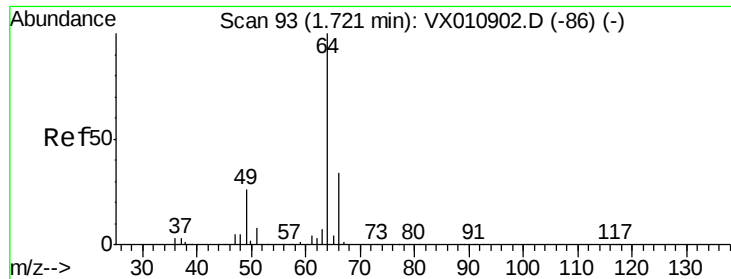
87 0.0 15.9 47.7#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0





#6

Chloroethane

Concen: 0.216 ug/l

RT: 1.73 min Scan# 95

Delta R.T. 0.01 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

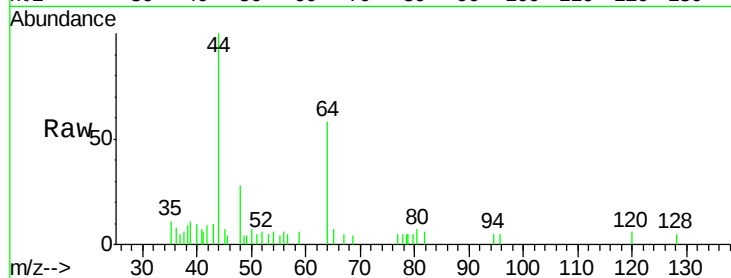
Z3-ER-2019-2

Tgt Ion: 64 Resp: 282

Ion Ratio Lower Upper

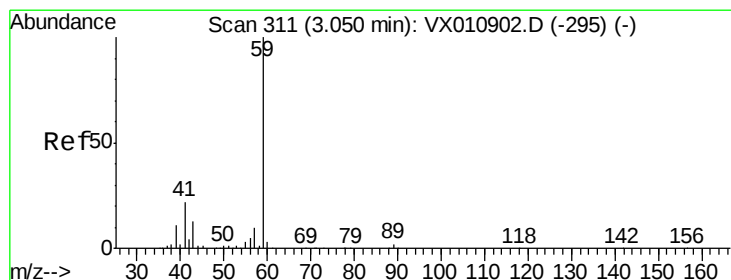
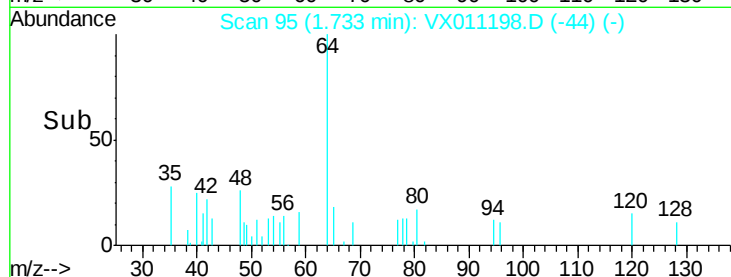
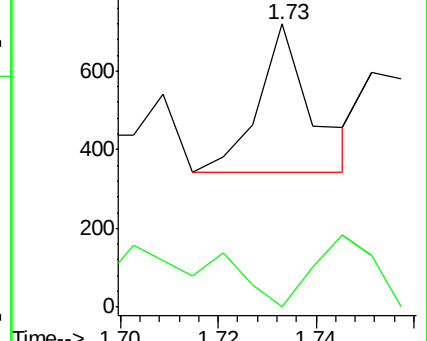
64 100

66 0.0 27.0 40.6#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#11

Tert butyl alcohol

Concen: 5.079 ug/l

RT: 3.02 min Scan# 306

Delta R.T. -0.03 min

Lab File: VX011198.D

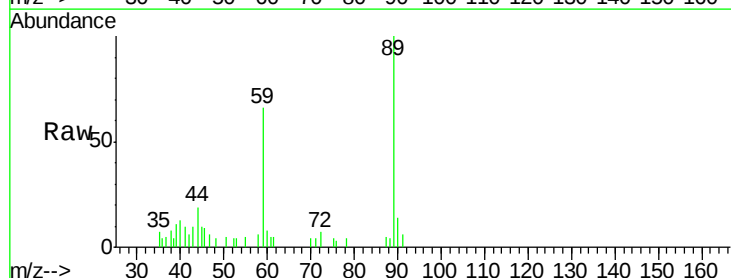
Acq: 30 Jul 2019 16:30

Tgt Ion: 59 Resp: 2755

Ion Ratio Lower Upper

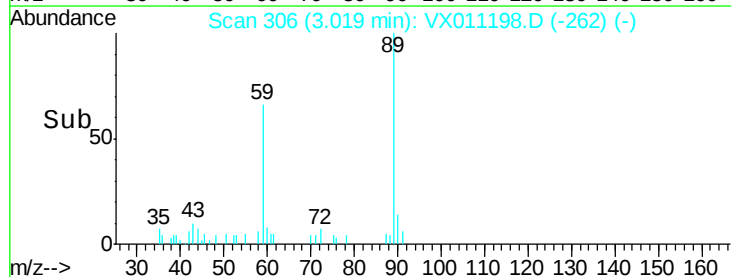
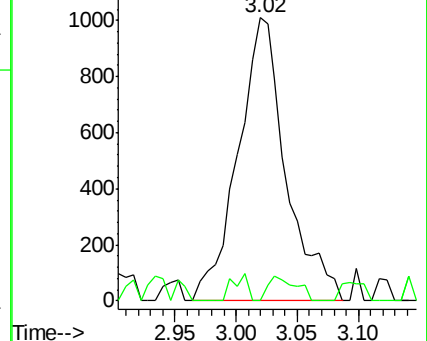
59 100

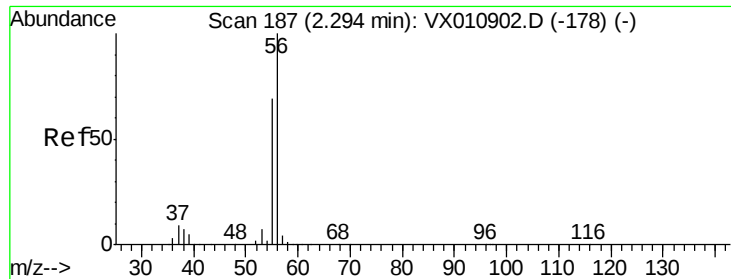
57 5.2 7.9 11.9#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

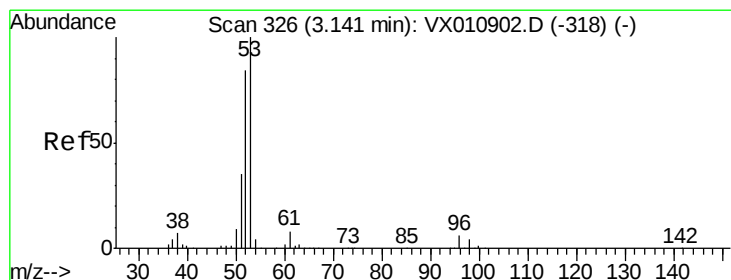
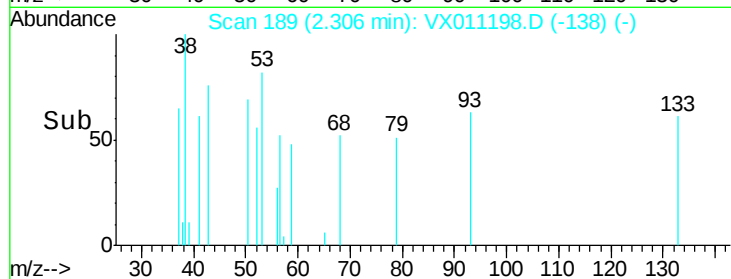
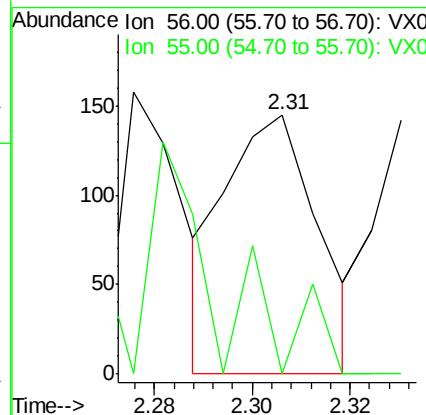
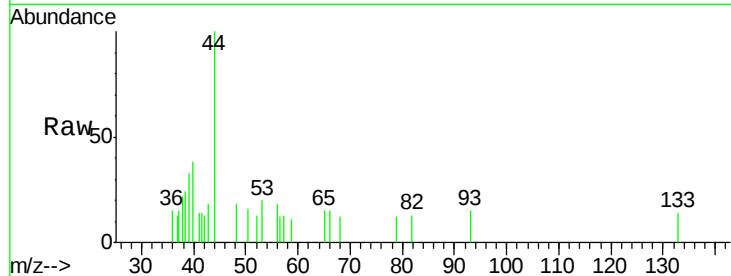




#13  
Acrolein  
Concen: 0.606 ug/l  
RT: 2.31 min Scan# 189  
Delta R.T. 0.01 min  
Lab File: VX011198.D  
Acq: 30 Jul 2019 16:30

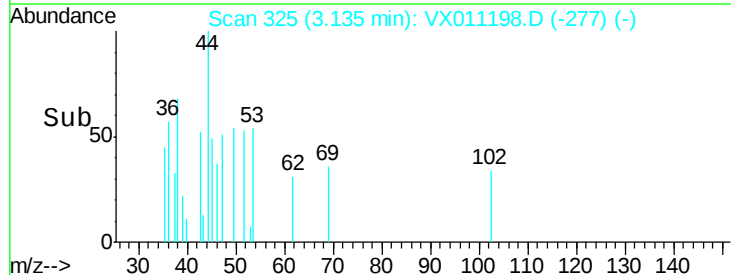
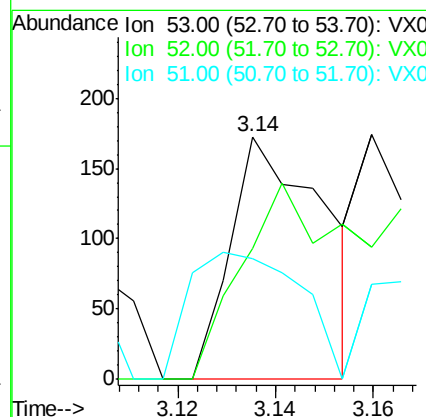
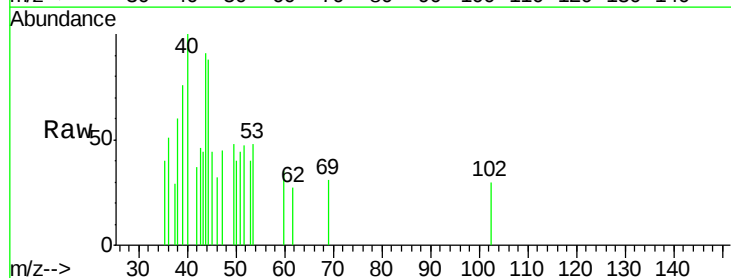
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-ER-2019-2

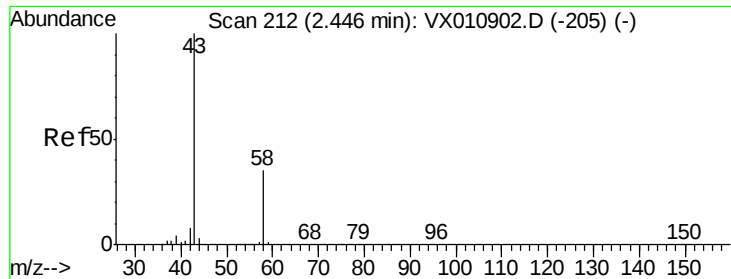
Tgt Ion: 56 Resp: 190  
Ion Ratio Lower Upper  
56 100  
55 0.0 55.9 83.9#



#15  
Acrylonitrile  
Concen: 0.209 ug/l  
RT: 3.14 min Scan# 325  
Delta R.T. -0.01 min  
Lab File: VX011198.D  
Acq: 30 Jul 2019 16:30

Tgt Ion: 53 Resp: 229  
Ion Ratio Lower Upper  
53 100  
52 94.8 66.5 99.7  
51 62.0 28.2 42.4#





#16

Acetone

Concen: 5.983 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

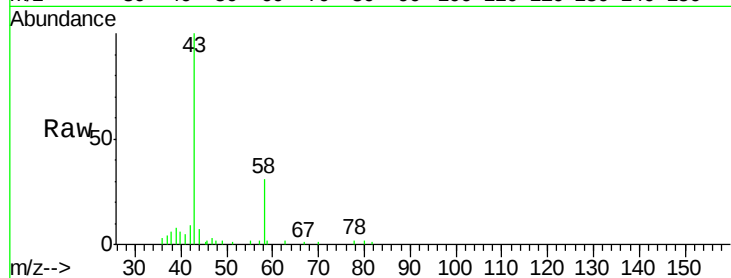
Z3-ER-2019-2

Tgt Ion: 43 Resp: 6294

Ion Ratio Lower Upper

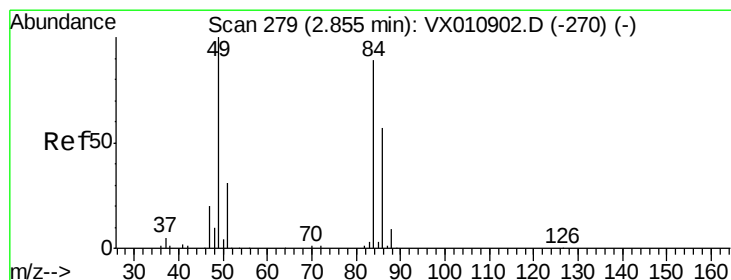
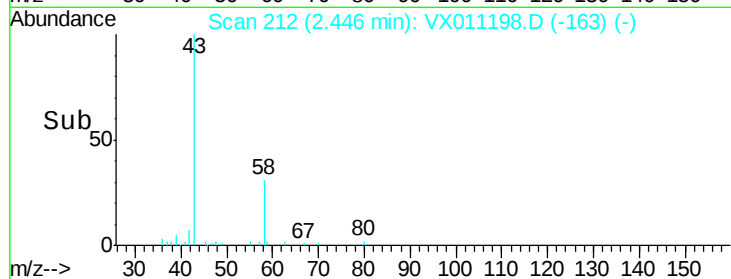
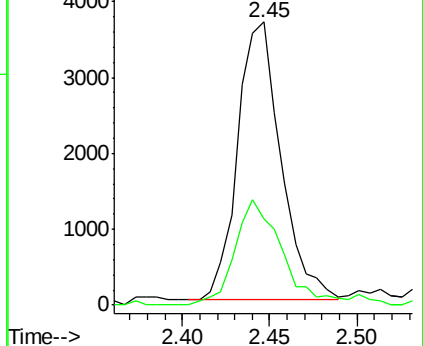
43 100

58 31.2 27.7 41.5



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#20

Methylene Chloride

Concen: 7.481 ug/l

RT: 2.86 min Scan# 280

Delta R.T. 0.01 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Tgt Ion: 84 Resp: 16678

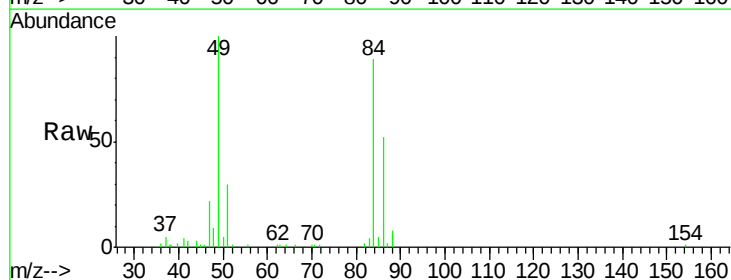
Ion Ratio Lower Upper

84 100

49 112.7 89.9 134.9

51 33.8 27.8 41.6

86 59.1 51.8 77.6

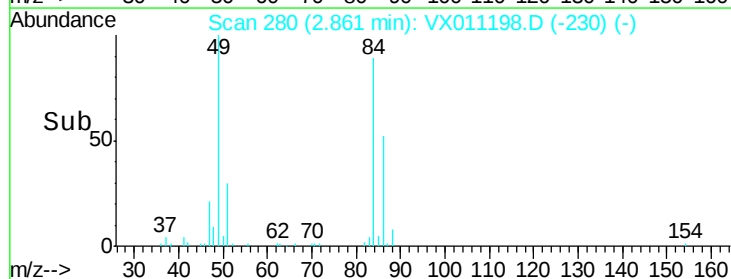
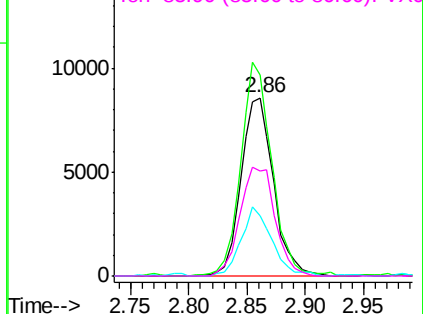


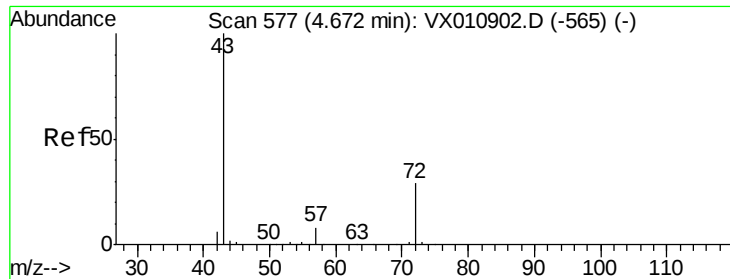
Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0





#25

2-Butanone

Concen: 17.881 ug/l

RT: 4.67 min Scan# 577

Delta R.T. 0.00 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

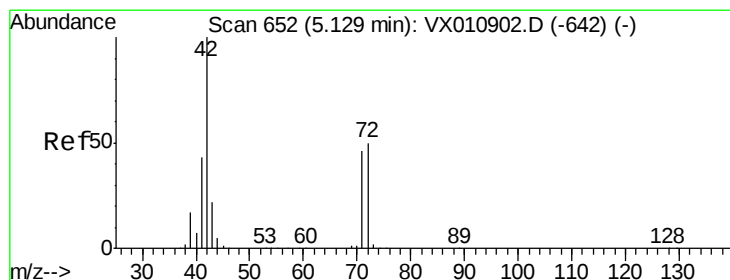
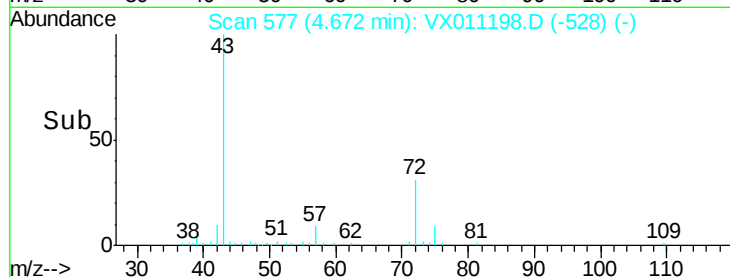
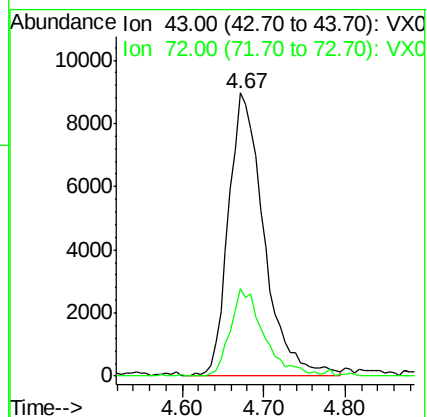
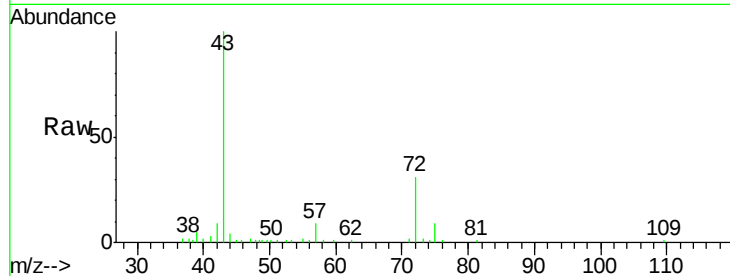
Z3-ER-2019-2

Tgt Ion: 43 Resp: 27003

Ion Ratio Lower Upper

43 100

72 31.0 23.0 34.6



#29

Tetrahydrofuran

Concen: 157.820 ug/l

RT: 5.13 min Scan# 652

Delta R.T. 0.00 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

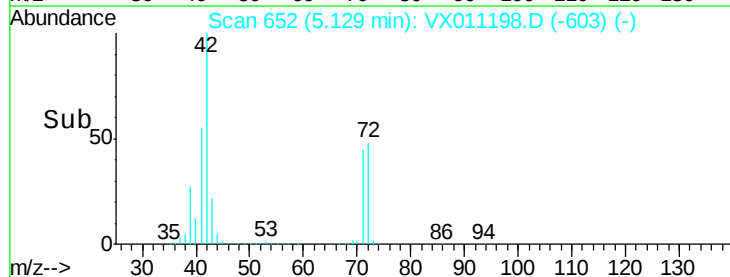
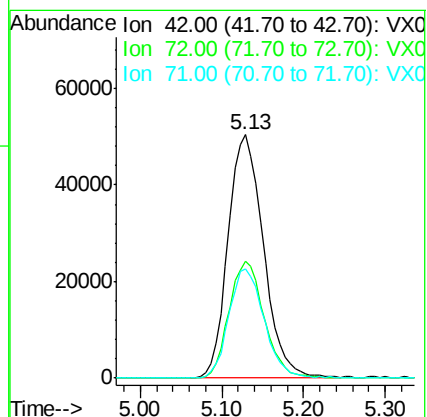
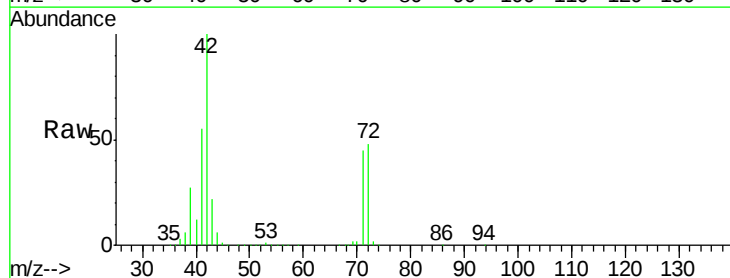
Tgt Ion: 42 Resp: 150968

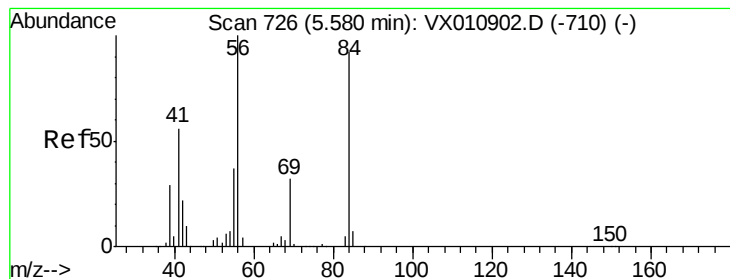
Ion Ratio Lower Upper

42 100

72 47.9 39.8 59.8

71 44.6 37.0 55.4





#31

Cyclohexane

Concen: 1.329 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.08 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

Z3-ER-2019-2

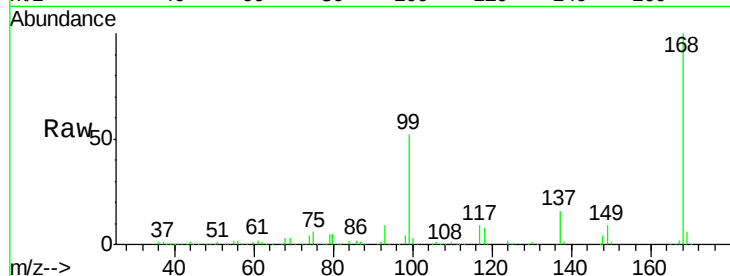
Tgt Ion: 56 Resp: 4204

Ion Ratio Lower Upper

56 100

69 173.5 25.8 38.8#

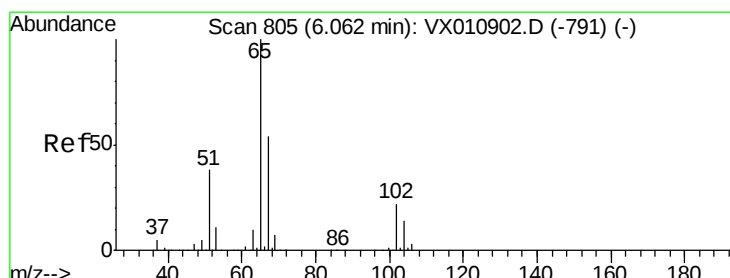
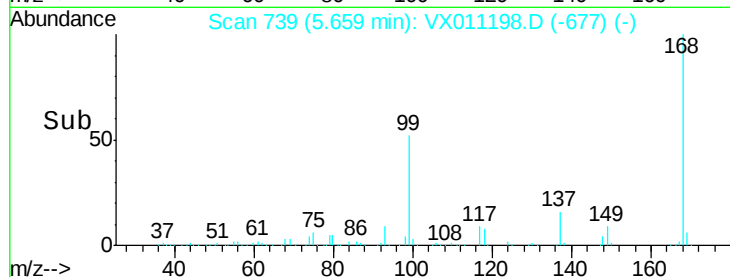
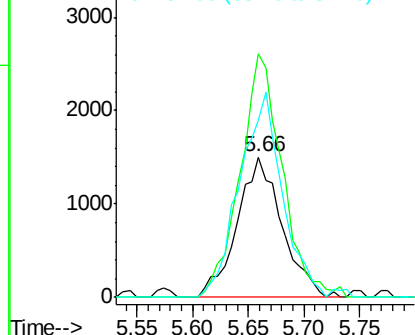
84 126.5 73.8 110.6#



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: 45.308 ug/l

RT: 6.06 min Scan# 805

Delta R.T. 0.00 min

Lab File: VX011198.D

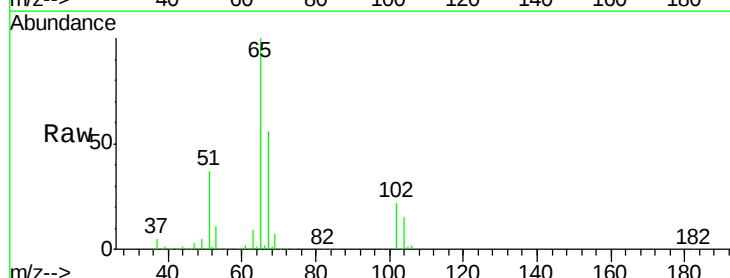
Acq: 30 Jul 2019 16:30

Tgt Ion: 65 Resp: 105534

Ion Ratio Lower Upper

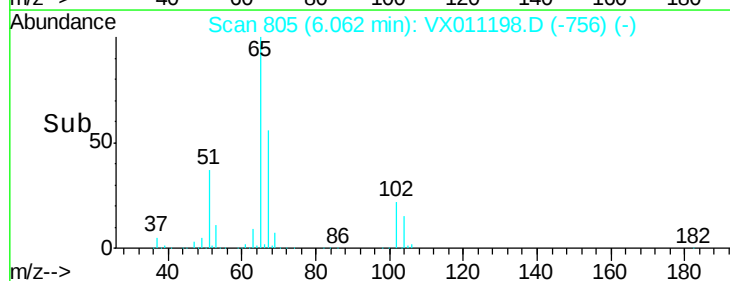
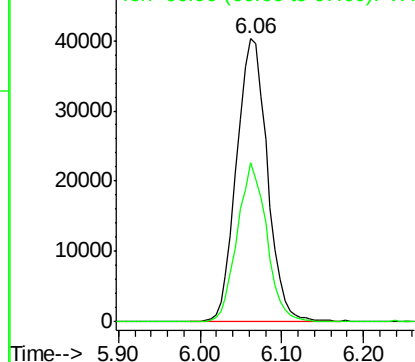
65 100

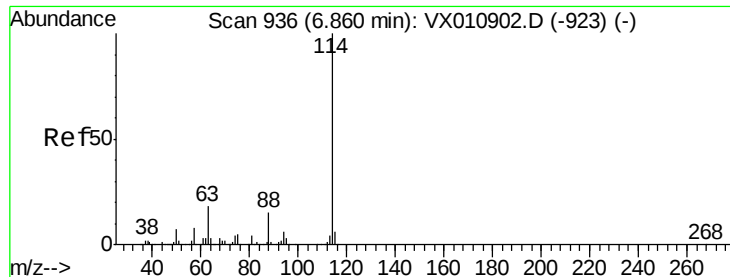
67 53.7 0.0 107.8



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: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

Z3-ER-2019-2

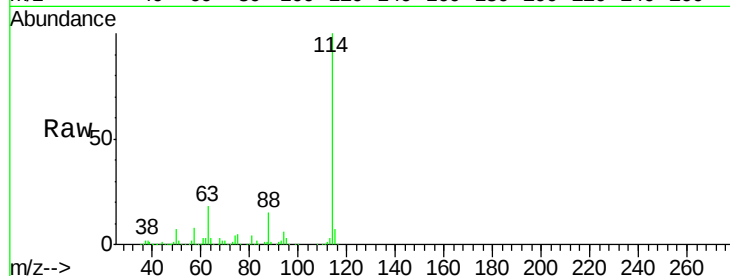
Tgt Ion:114 Resp: 308408

Ion Ratio Lower Upper

114 100

63 18.3 0.0 35.6

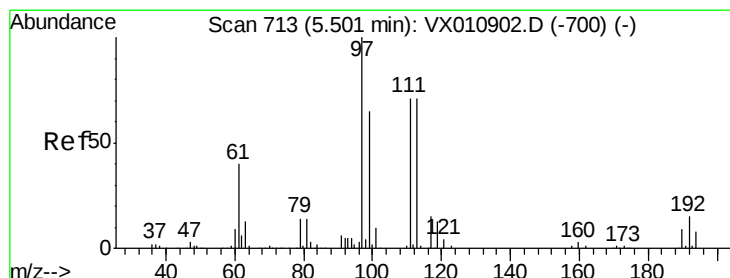
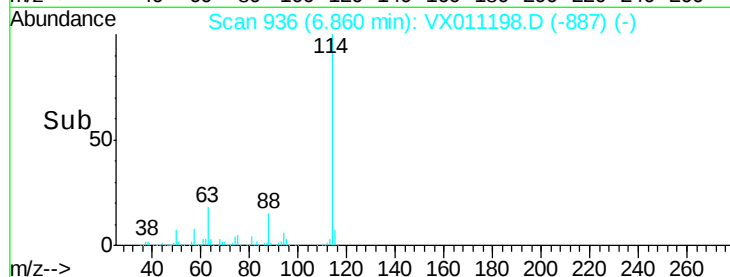
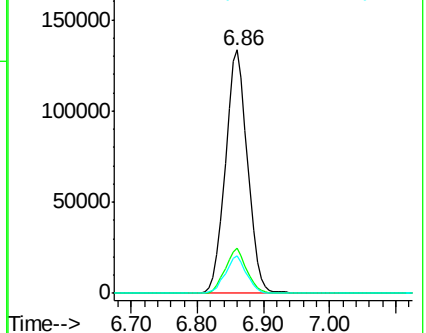
88 15.2 0.0 29.8



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: 47.146 ug/l

RT: 5.50 min Scan# 713

Delta R.T. 0.00 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

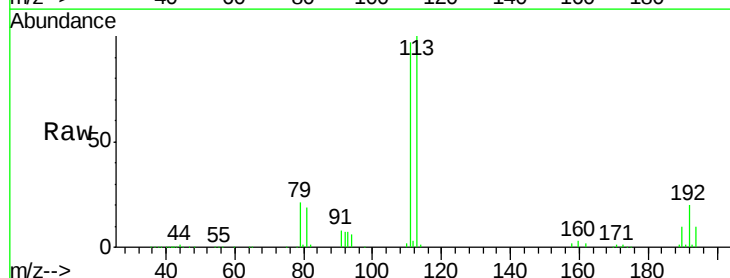
Tgt Ion:113 Resp: 92290

Ion Ratio Lower Upper

113 100

111 102.3 82.3 123.5

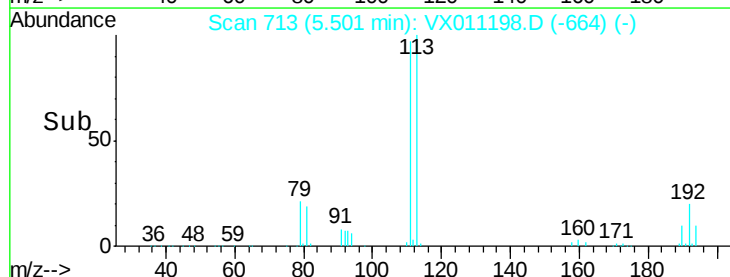
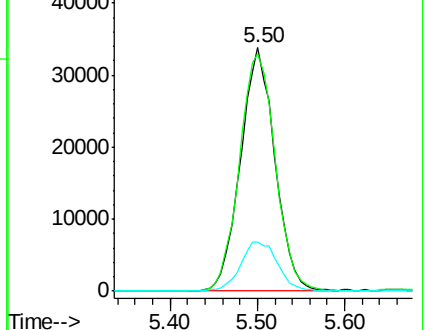
192 21.8 17.4 26.2

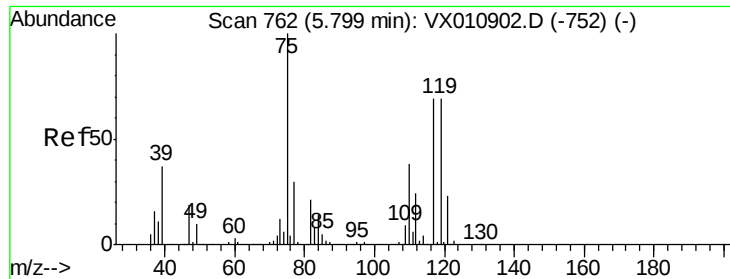


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

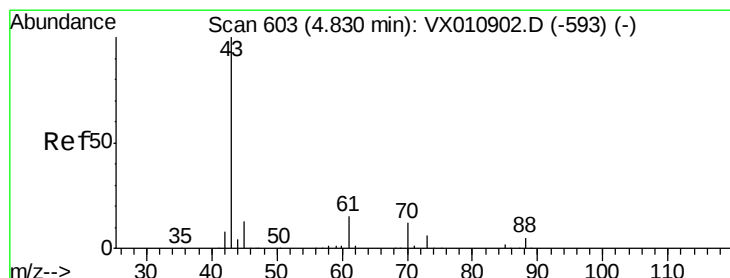
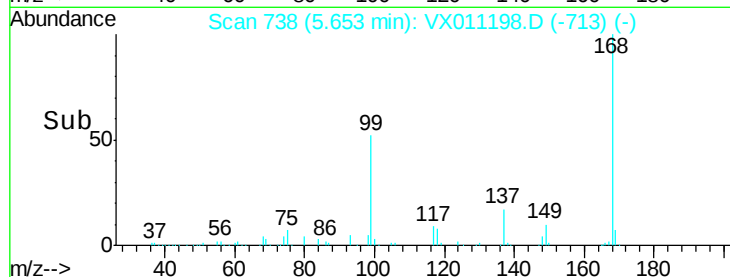
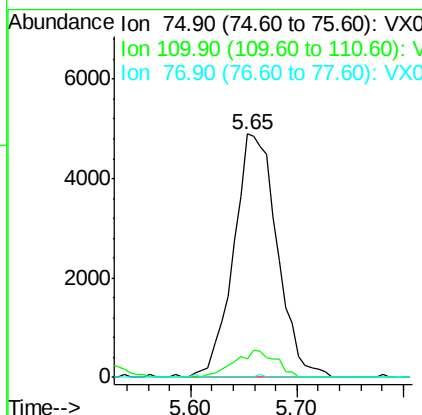
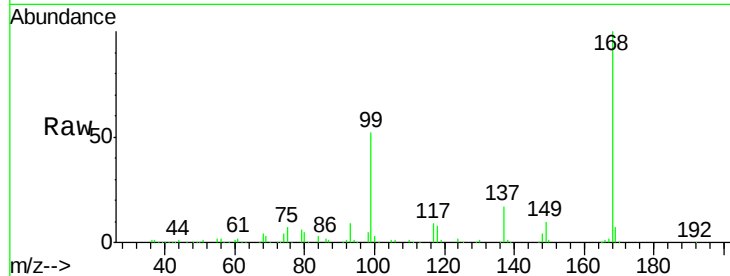




#36  
 1,1-Dichloropropene  
 Concen: 5.537 ug/l  
 RT: 5.65 min Scan# 738  
 Delta R.T. -0.15 min  
 Lab File: VX011198.D  
 Acq: 30 Jul 2019 16:30

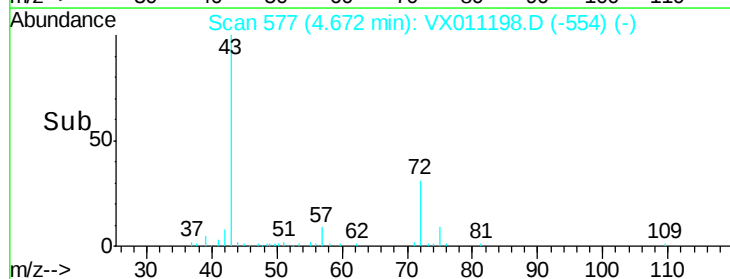
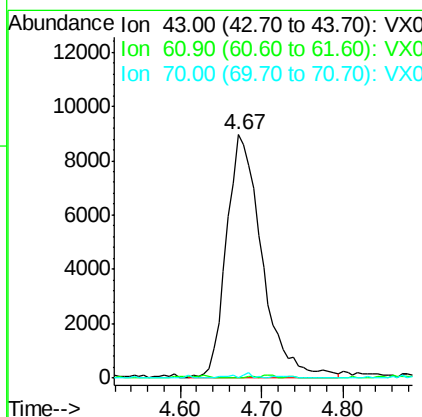
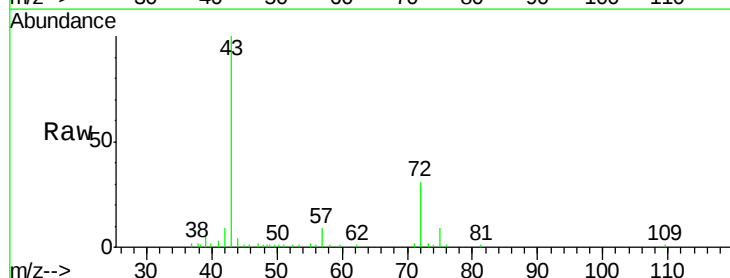
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 Z3-ER-2019-2

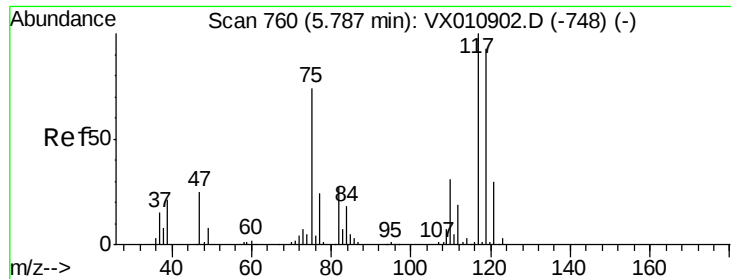
Tgt Ion: 75 Resp: 14026  
 Ion Ratio Lower Upper  
 75 100  
 110 10.7 19.9 59.7#  
 77 0.2 25.0 37.4#



#37  
 Ethyl Acetate  
 Concen: 10.410 ug/l  
 RT: 4.67 min Scan# 577  
 Delta R.T. -0.16 min  
 Lab File: VX011198.D  
 Acq: 30 Jul 2019 16:30

Tgt Ion: 43 Resp: 27003  
 Ion Ratio Lower Upper  
 43 100  
 61 0.0 11.6 17.4#  
 70 0.5 9.1 13.7#





#38

Carbon Tetrachloride

Concen: 7.640 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

Z3-ER-2019-2

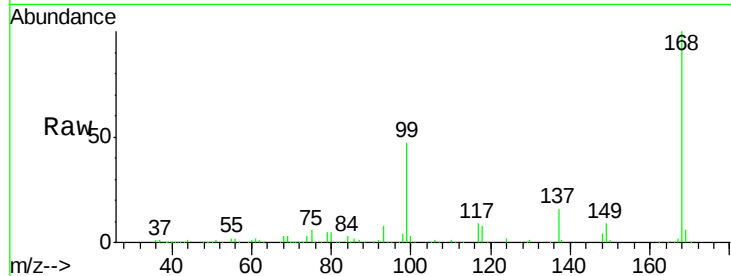
Tgt Ion:117 Resp: 20169

Ion Ratio Lower Upper

117 100

119 4.5 74.2 111.2#

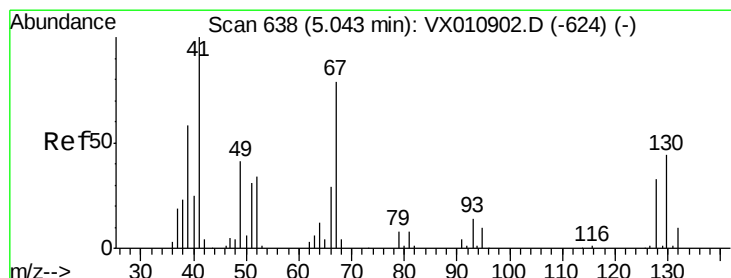
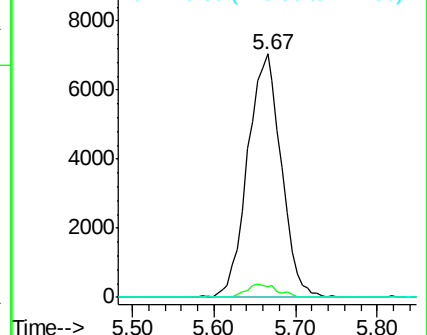
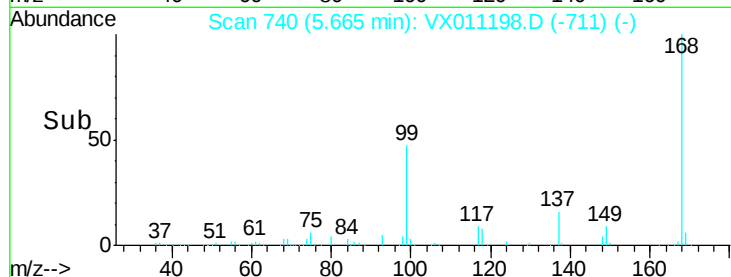
121 0.0 24.2 36.2#



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



#41

Methacrylonitrile

Concen: 58.040 ug/l

RT: 5.12 min Scan# 651

Delta R.T. 0.08 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Tgt Ion: 41 Resp: 85468

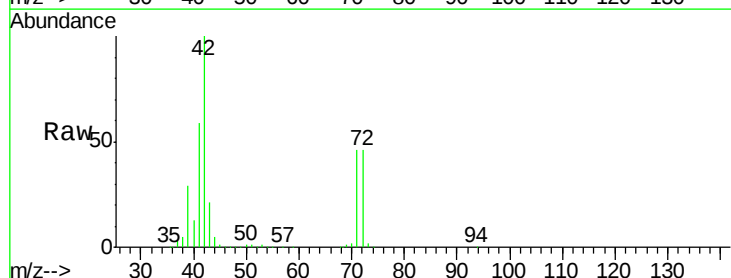
Ion Ratio Lower Upper

41 100

39 49.0 45.4 68.2

67 0.0 65.9 98.9#

52 0.3 26.2 39.2#

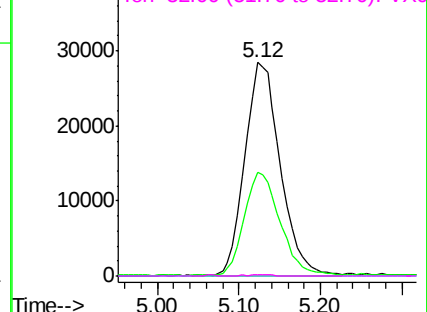
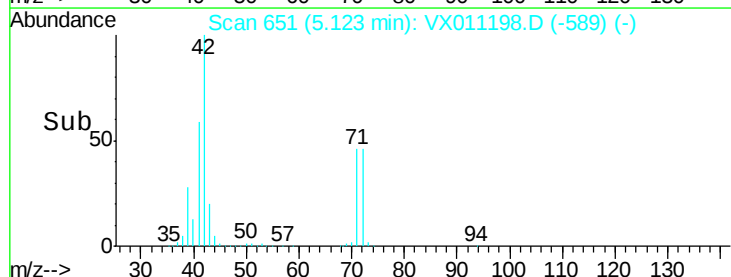


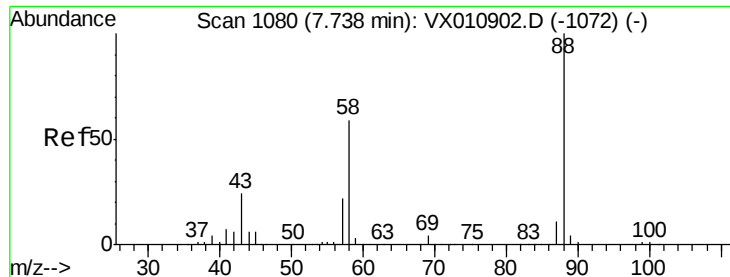
Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

Ion 67.00 (66.70 to 67.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

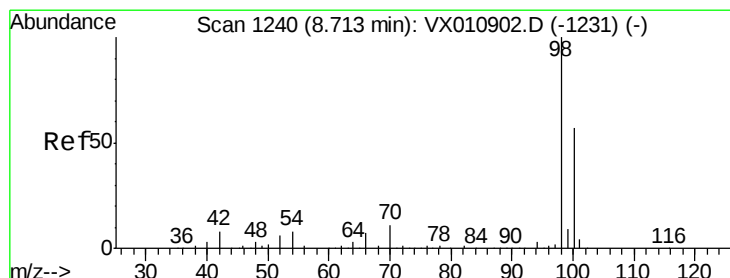
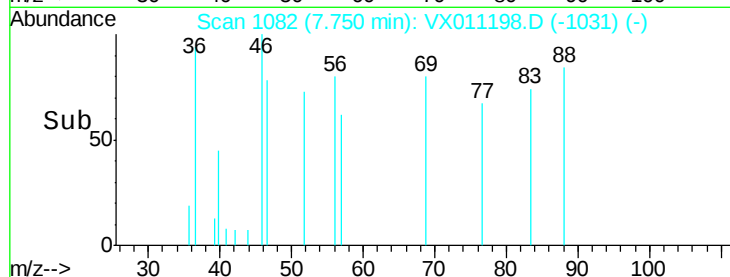
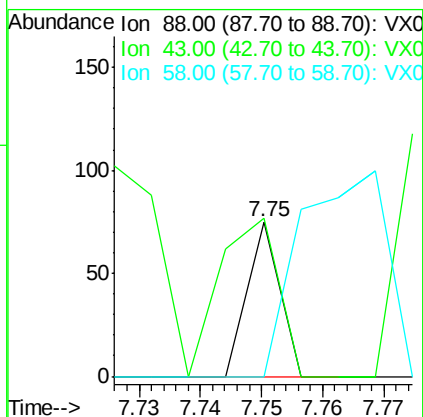
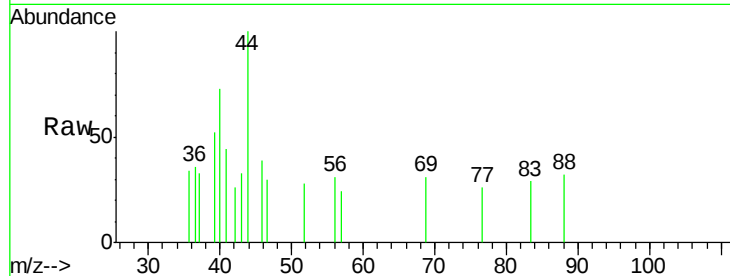




#49  
1,4-Dioxane  
Concen: 0.465 ug/l  
RT: 7.75 min Scan# 1082  
Delta R.T. 0.01 min  
Lab File: VX011198.D  
Acq: 30 Jul 2019 16:30

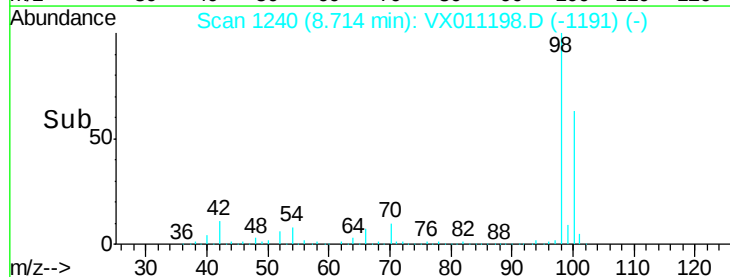
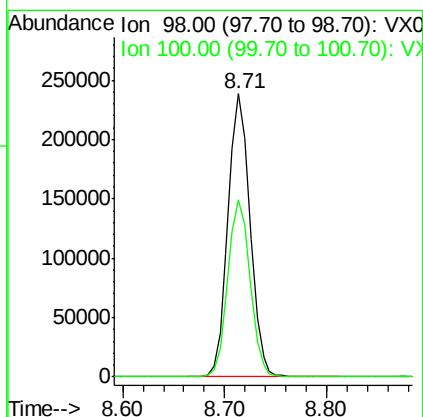
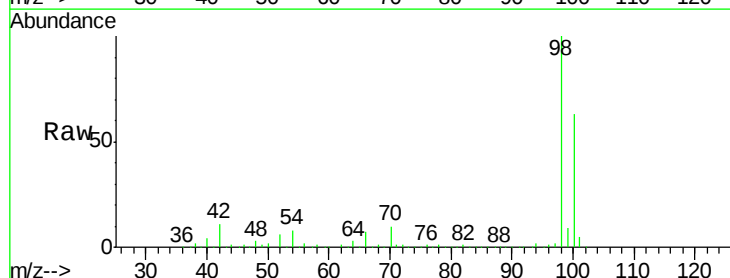
Instrument :  
MSVOA\_X  
ClientSampleId :  
Z3-ER-2019-2

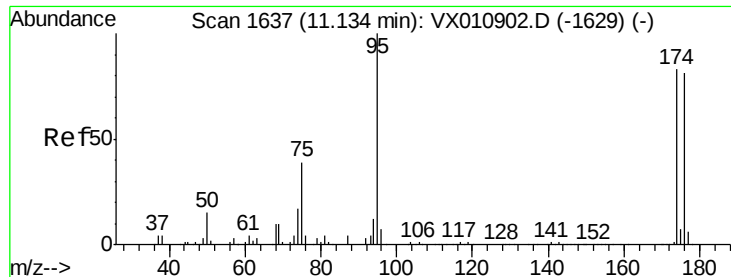
Tgt Ion: 88 Resp: 27  
Ion Ratio Lower Upper  
88 100  
43 188.9 22.9 34.3#  
58 0.0 49.8 74.8#



#50  
Toluene-d8  
Concen: 48.638 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. 0.00 min  
Lab File: VX011198.D  
Acq: 30 Jul 2019 16:30

Tgt Ion: 98 Resp: 357098  
Ion Ratio Lower Upper  
98 100  
100 62.9 50.6 75.8





#62

4-Bromofluorobenzene

Concen: 42.865 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

Z3-ER-2019-2

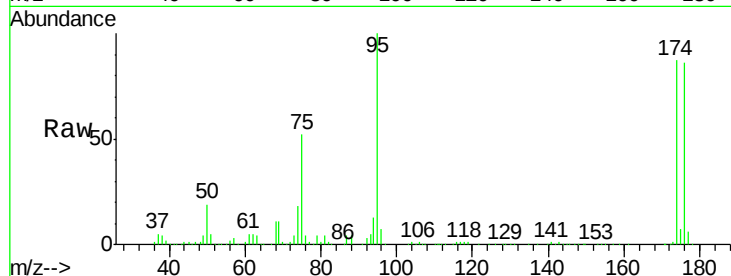
Tgt Ion: 95 Resp: 115680

Ion Ratio Lower Upper

95 100

174 92.5 0.0 180.6

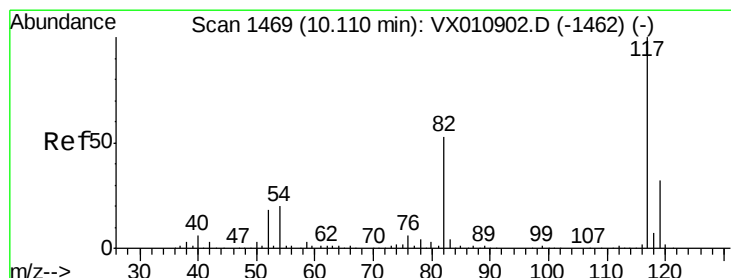
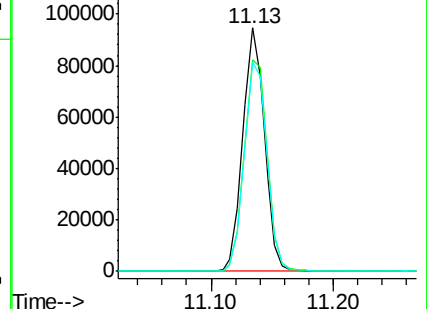
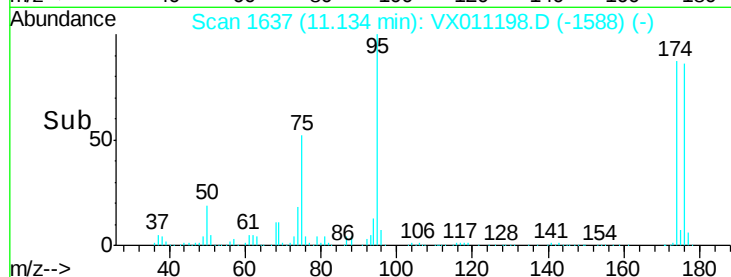
176 90.1 0.0 173.8



Abundance Ion 94.90 (94.60 to 95.60): VX011198.D (-1588) (-)

Ion 173.80 (173.50 to 174.50): VX011198.D (-1588) (-)

Ion 175.80 (175.50 to 176.50): VX011198.D (-1588) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. 0.00 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

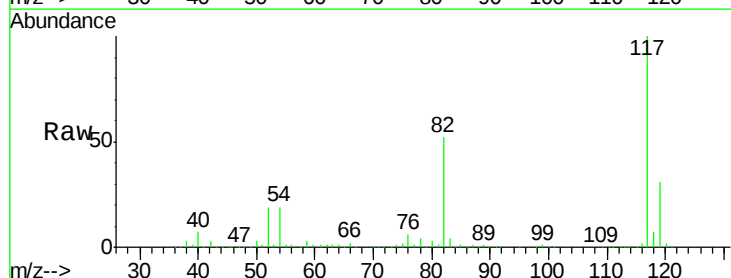
Tgt Ion: 117 Resp: 269066

Ion Ratio Lower Upper

117 100

82 52.5 42.6 63.8

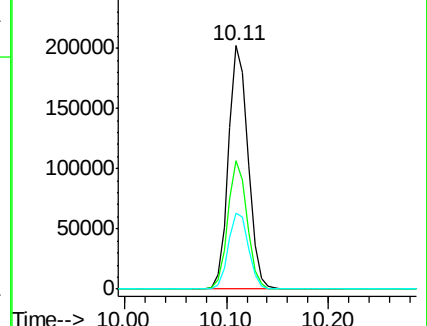
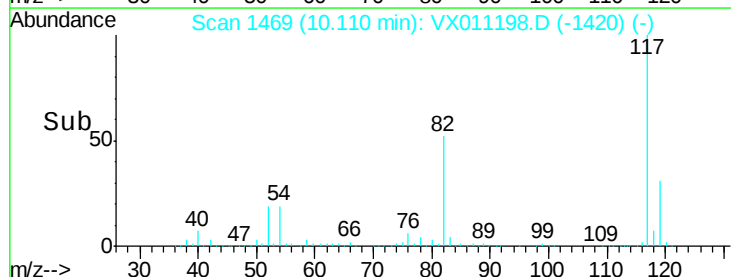
119 31.4 25.9 38.9

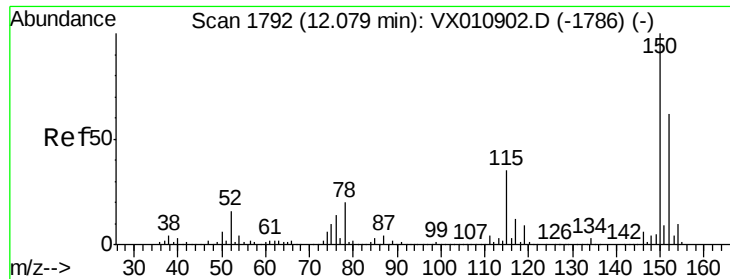


Abundance Ion 116.90 (116.60 to 117.60): VX011198.D (-1420) (-)

Ion 82.00 (81.70 to 82.70): VX011198.D (-1420) (-)

Ion 118.90 (118.60 to 119.60): VX011198.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: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

Z3-ER-2019-2

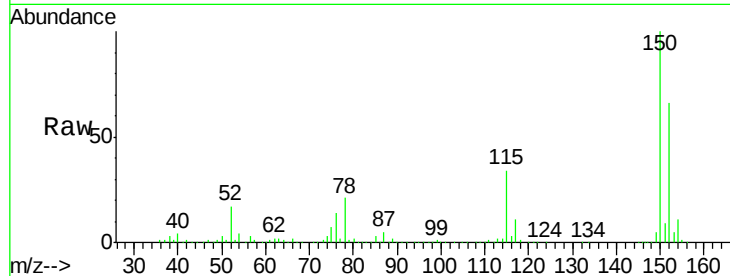
Tgt Ion:152 Resp: 125373

Ion Ratio Lower Upper

152 100

115 56.2 39.7 119.1

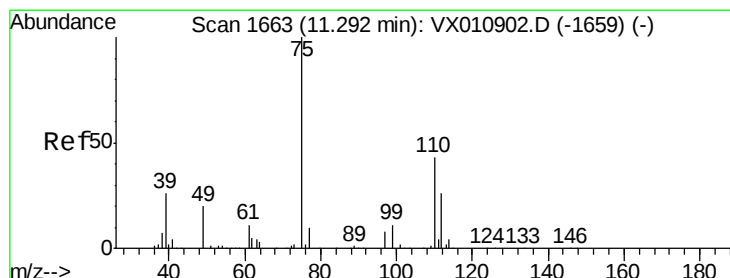
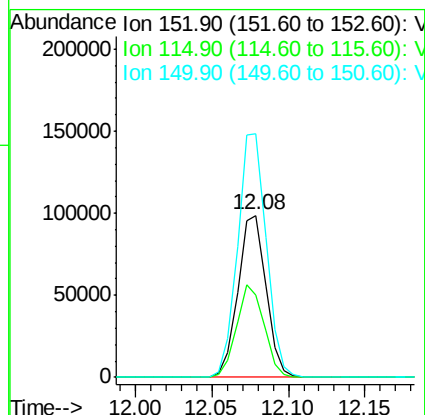
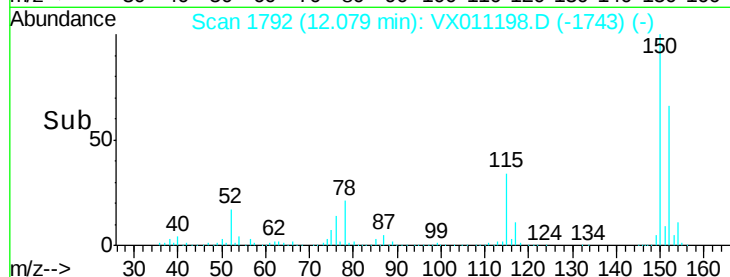
150 153.7 0.0 345.6



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: 26.028 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX011198.D

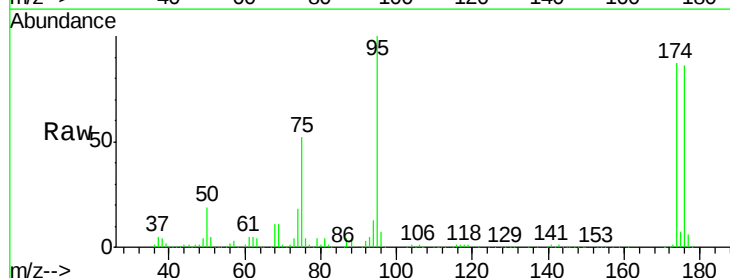
Acq: 30 Jul 2019 16:30

Tgt Ion: 75 Resp: 58887

Ion Ratio Lower Upper

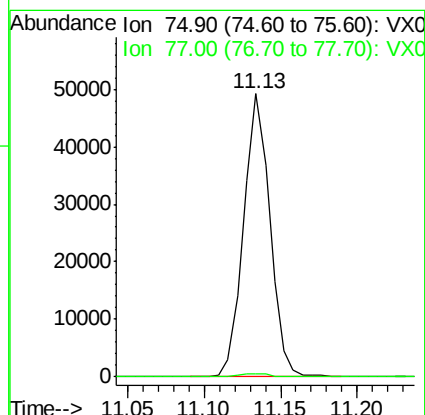
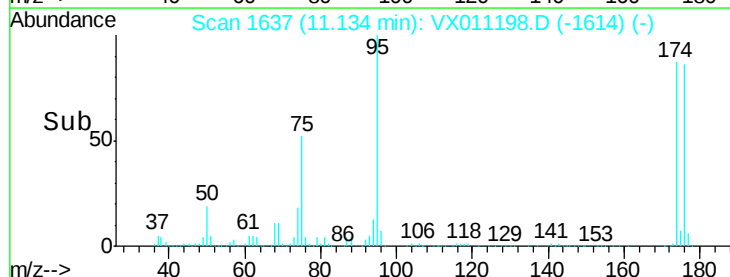
75 100

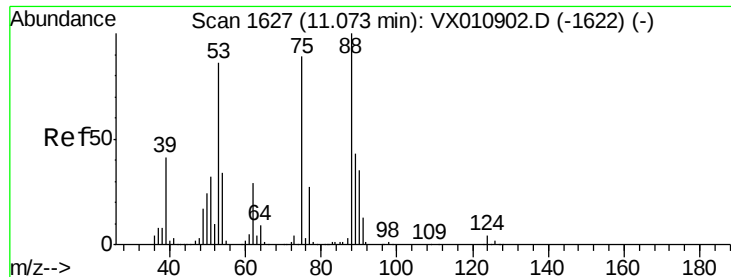
77 1.3 21.3 64.0#



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: 64.675 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011198.D

Acq: 30 Jul 2019 16:30

Instrument :

MSVOA\_X

ClientSampleId :

Z3-ER-2019-2

Tgt Ion: 75 Resp: 58887

Ion Ratio Lower Upper

75 100

53 0.3 76.7 115.1#

89 0.0 38.5 57.7#

