

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX072219\  
 Data File : VX011037.D  
 Acq On : 22 Jul 2019 17:46  
 Operator : JC/SP  
 Sample : K3921-02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SU19-MSW0619-9002

Quant Time: Jul 23 03:45:48 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 20 04:05:59 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 216804   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 348660   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 333053   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 155727   | 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   | 118204   | 51.25 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.50% |          |
| 35) Dibromofluoromethane    | 5.50  | 113  | 109771   | 49.60 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.20%  |          |
| 50) Toluene-d8              | 8.71  | 98   | 422898   | 50.95 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.90% |          |
| 62) 4-Bromofluorobenzene    | 11.13 | 95   | 153043   | 50.16 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.32% |          |

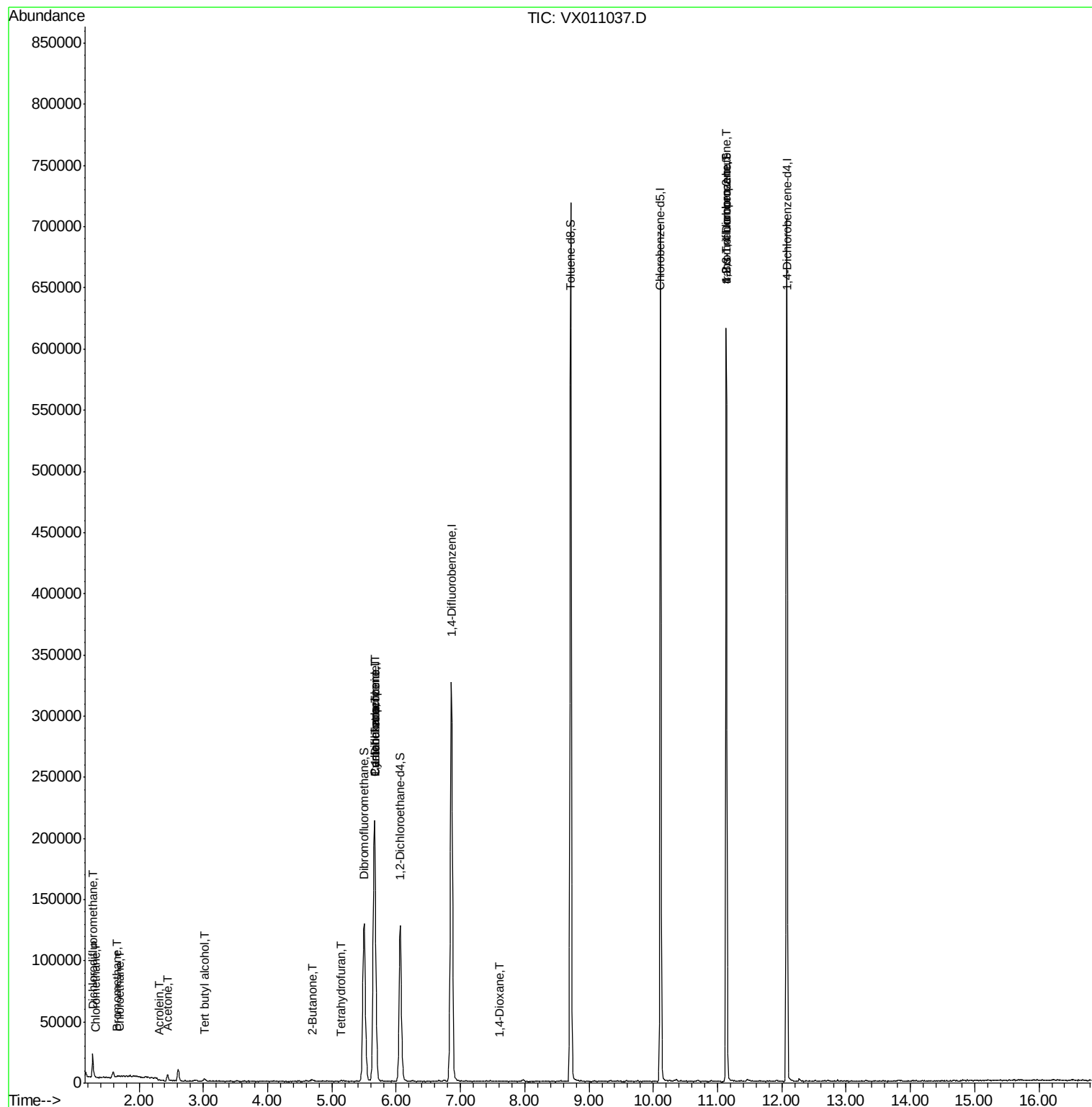
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.28  | 85   | 19       | 0.554  | ug/l # | 43     |
| 3) Chloromethane               | 1.33  | 50   | 640      | 0.321  | ug/l   | 96     |
| 5) Bromomethane                | 1.66  | 94   | 350      | 0.305  | ug/l   | 90     |
| 6) Chloroethane                | 1.71  | 64   | 376      | 0.291  | ug/l # | 41     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 1129     | 2.102  | ug/l # | 85     |
| 13) Acrolein                   | 2.31  | 56   | 110      | 0.354  | ug/l # | 15     |
| 16) Acetone                    | 2.44  | 43   | 5478     | 5.259  | ug/l   | 95     |
| 25) 2-Butanone                 | 4.69  | 43   | 1182     | 0.790  | ug/l # | 83     |
| 29) Tetrahydrofuran            | 5.15  | 42   | 399      | 0.421  | ug/l # | 65     |
| 31) Cyclohexane                | 5.66  | 56   | 4115     | 1.314  | ug/l # | 4      |
| 36) 1,1-Dichloropropene        | 5.67  | 75   | 14304    | 4.995  | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 5.67  | 117  | 20508    | 6.872  | ug/l # | 18     |
| 49) 1,4-Dioxane                | 7.61  | 88   | 24       | 0.365  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.13 | 75   | 75793    | 26.971 | ug/l # | 35     |
| 81) trans-1,4-Dichloro-2-buten | 11.13 | 75   | 75793    | 66.873 | ug/l # | 11     |

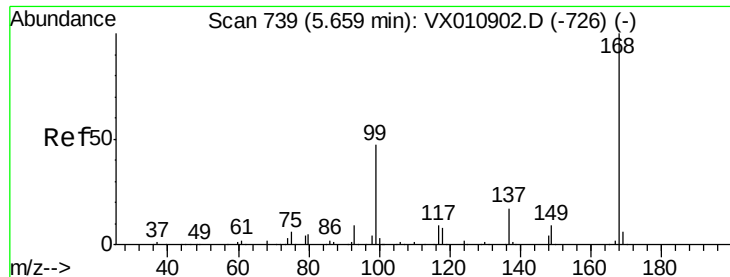
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX072219\  
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Instrument :  
MSVOA\_X  
ClientSampleId :  
SU19-MSW0619-9002

Quant Time: Jul 23 03:45:48 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X071619W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jul 20 04:05:59 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: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

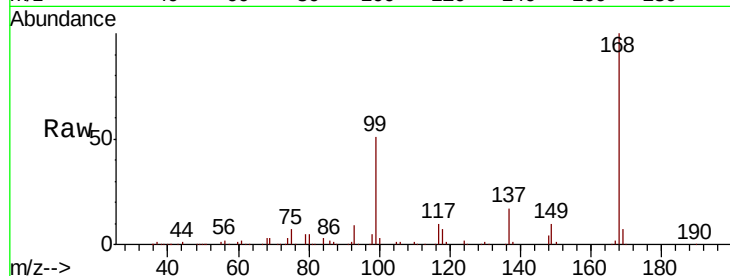
SU19-MSW0619-9002

Tot Ion:168 Resp: 216804

Ion Ratio Lower Upper

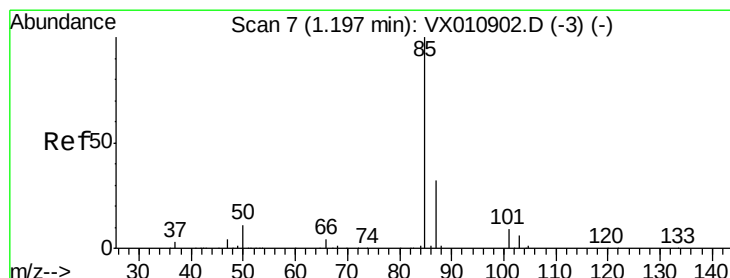
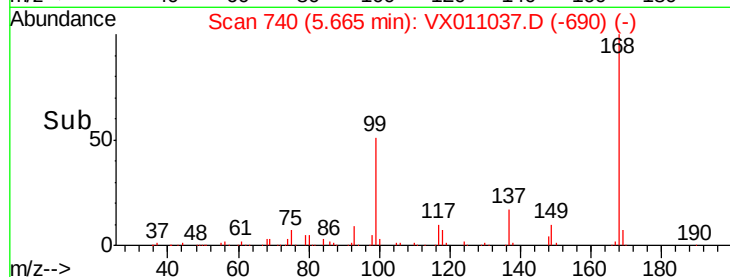
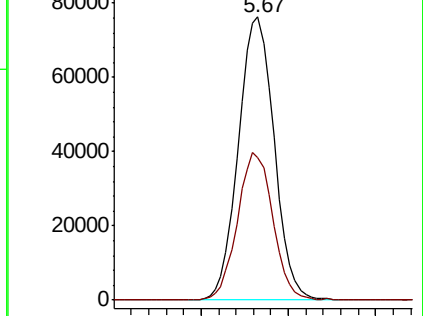
168 100

99 50.6 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: 0.554 ug/l

RT: 1.28 min Scan# 20

Delta R.T. 0.08 min

Lab File: VX011037.D

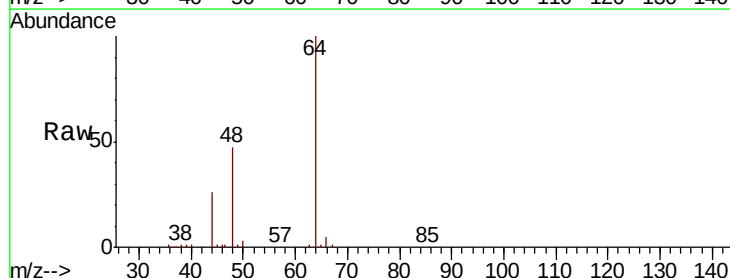
Acq: 22 Jul 2019 17:46

Tgt Ion: 85 Resp: 19

Ion Ratio Lower Upper

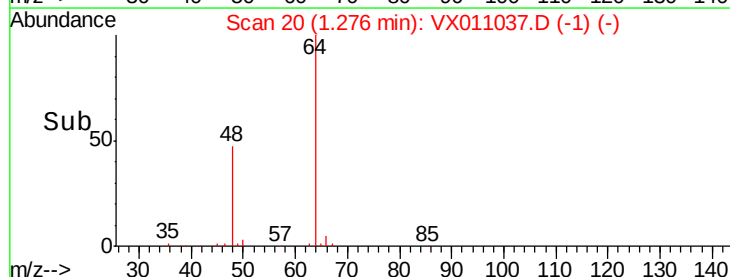
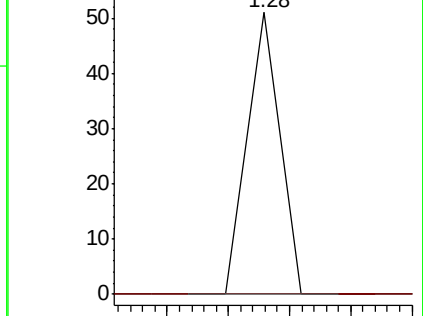
85 100

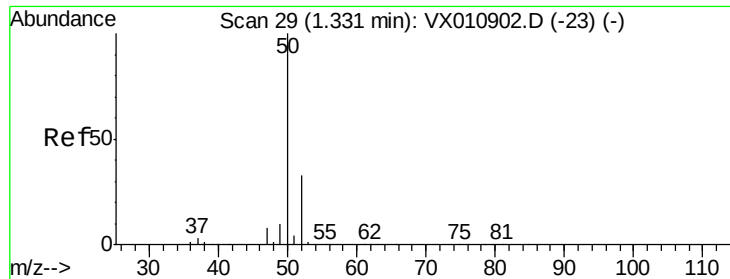
87 0.0 15.9 47.7#



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0





#3

Chloromethane

Concen: 0.321 ug/l

RT: 1.33 min Scan# 29

Delta R.T. -0.00 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

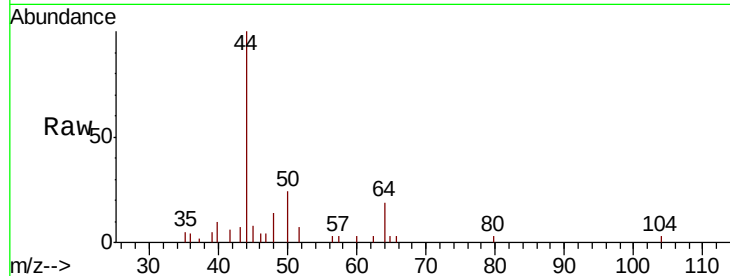
SU19-MSW0619-9002

Tot Ion: 50 Resp: 640

Ion Ratio Lower Upper

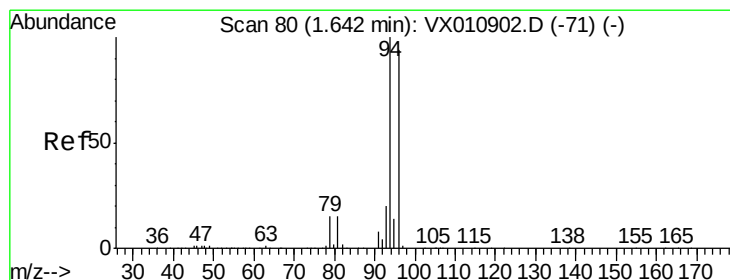
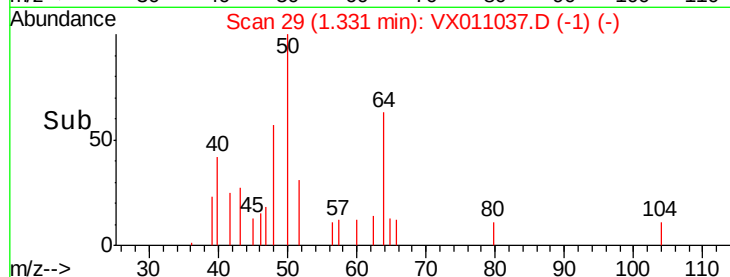
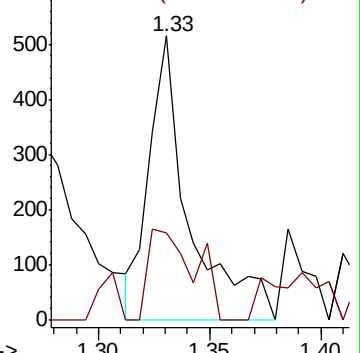
50 100

52 30.7 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: 0.305 ug/l

RT: 1.66 min Scan# 83

Delta R.T. 0.02 min

Lab File: VX011037.D

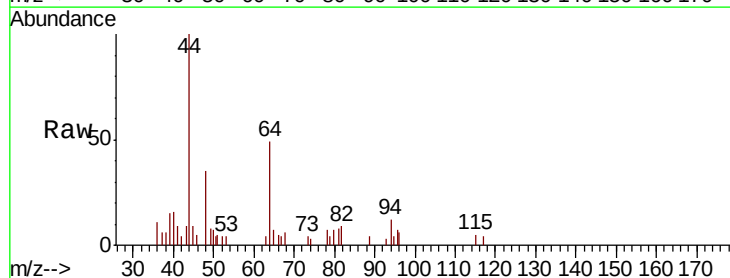
Acq: 22 Jul 2019 17:46

Tgt Ion: 94 Resp: 350

Ion Ratio Lower Upper

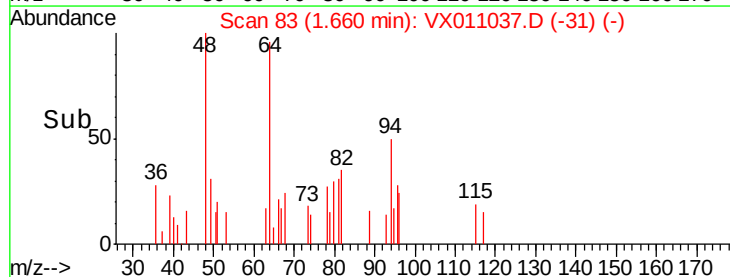
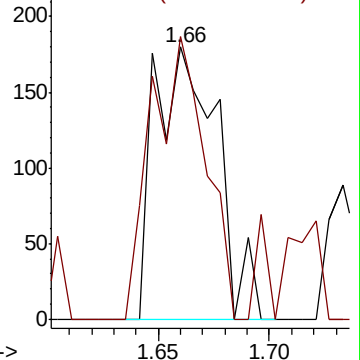
94 100

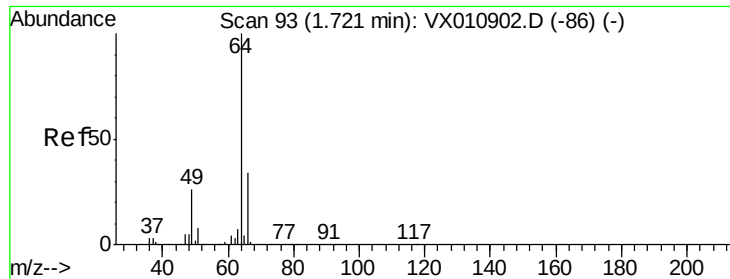
96 103.9 75.6 113.4



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0





#6

Chloroethane

Concen: 0.291 ug/l

RT: 1.71 min Scan# 91

Delta R.T. -0.01 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

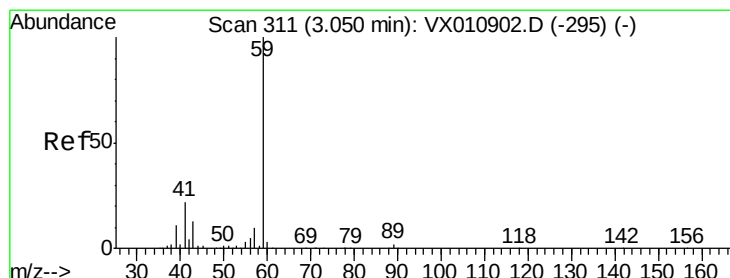
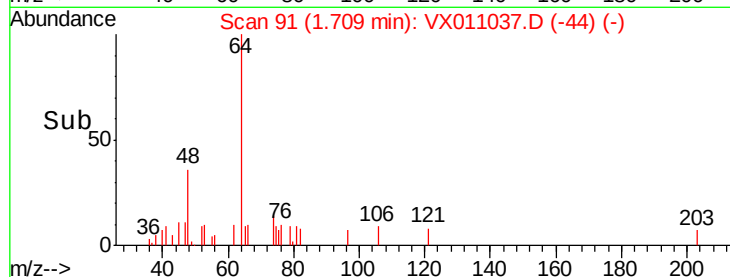
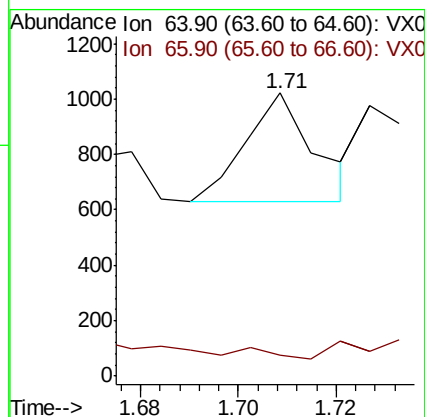
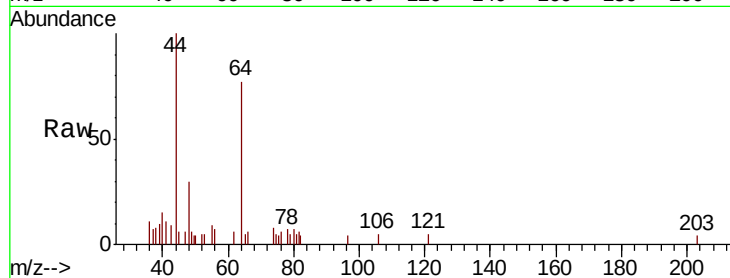
SU19-MSW0619-9002

Tot Ion: 64 Resp: 376

Ion Ratio Lower Upper

64 100

66 0.0 27.0 40.6#



#11

Tert butyl alcohol

Concen: 2.102 ug/l

RT: 3.01 min Scan# 304

Delta R.T. -0.04 min

Lab File: VX011037.D

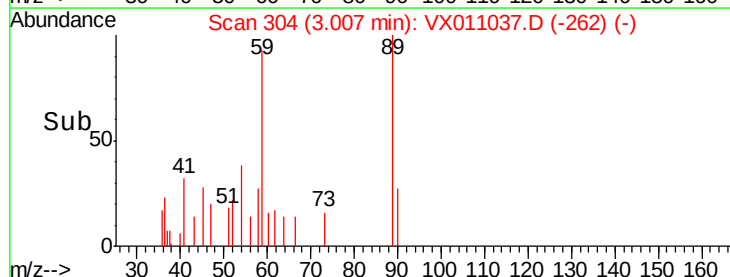
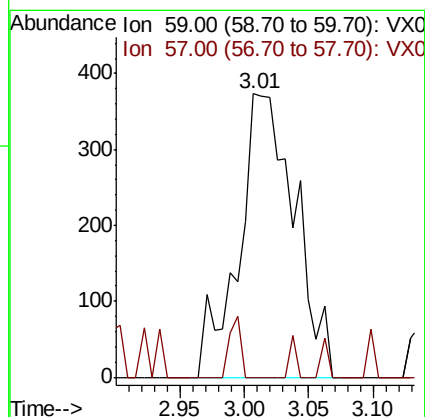
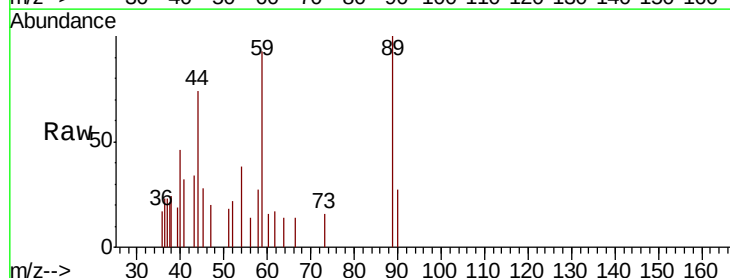
Acq: 22 Jul 2019 17:46

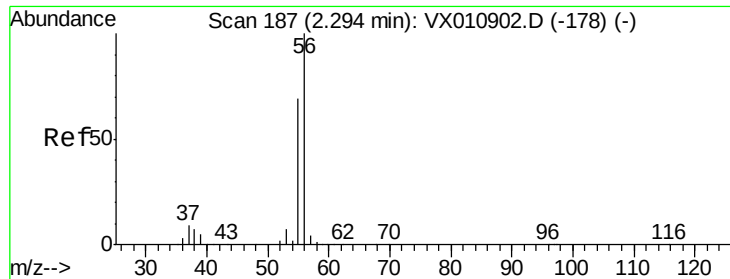
Tgt Ion: 59 Resp: 1129

Ion Ratio Lower Upper

59 100

57 4.5 7.9 11.9#





#13

Acrolein

Concen: 0.354 ug/l

RT: 2.31 min Scan# 189

Delta R.T. 0.01 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

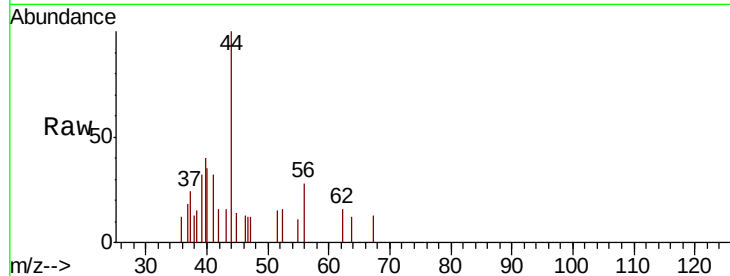
SU19-MSW0619-9002

Tot Ion: 56 Resp: 110

Ion Ratio Lower Upper

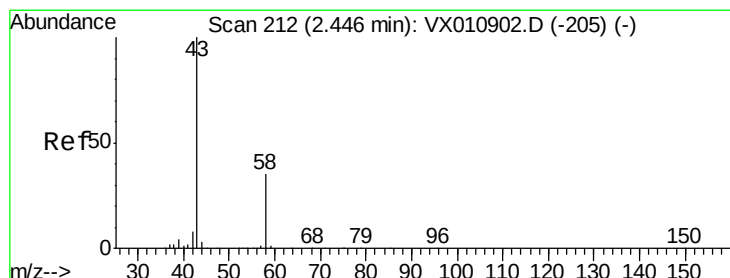
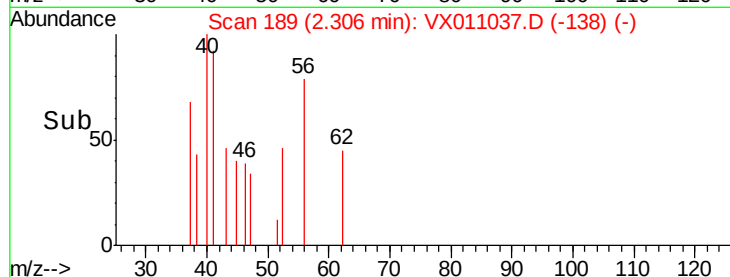
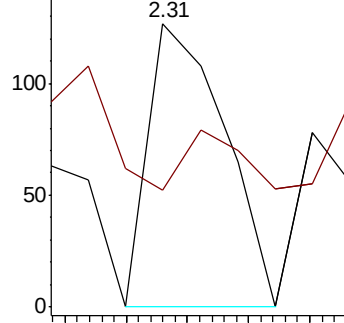
56 100

55 0.0 55.9 83.9#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#16

Acetone

Concen: 5.259 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX011037.D

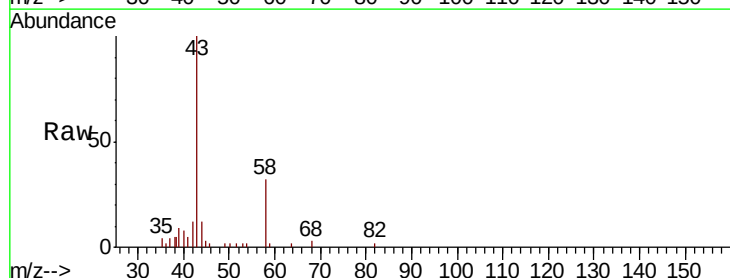
Acq: 22 Jul 2019 17:46

Tgt Ion: 43 Resp: 5478

Ion Ratio Lower Upper

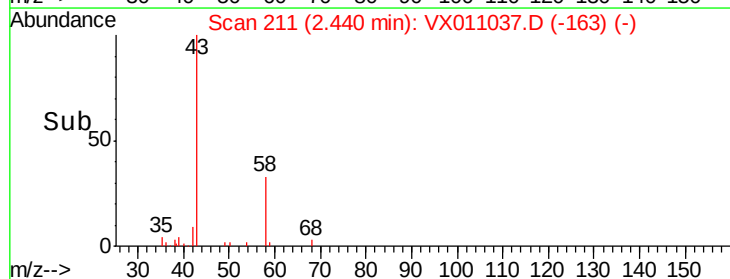
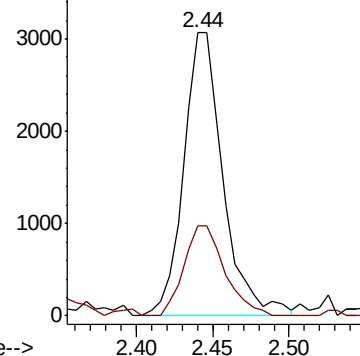
43 100

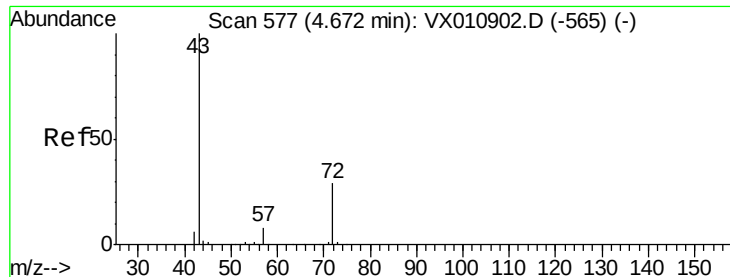
58 31.7 27.7 41.5



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0





#25

2-Butanone

Concen: 0.790 ug/l

RT: 4.69 min Scan# 580

Delta R.T. 0.02 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

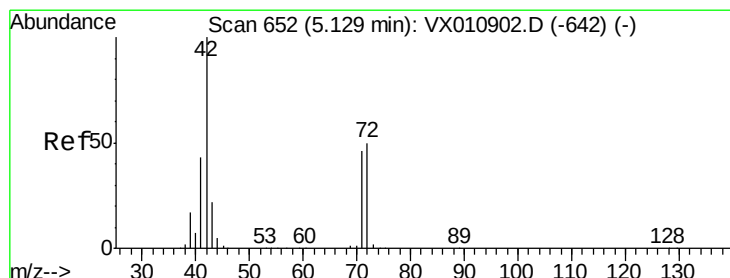
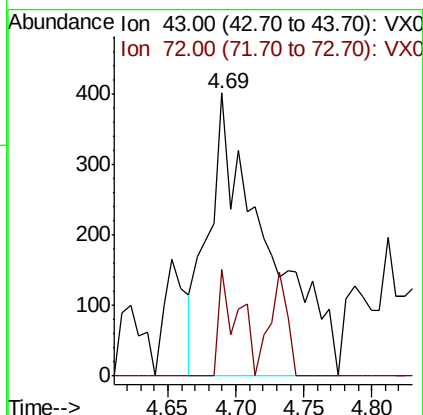
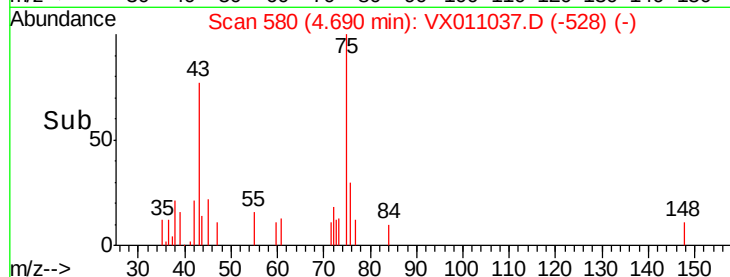
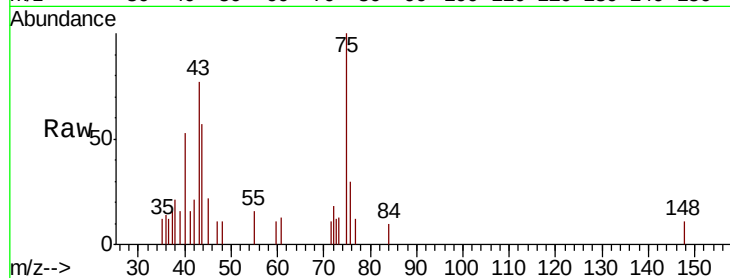
SU19-MSW0619-9002

Tot Ion: 43 Resp: 1182

Ion Ratio Lower Upper

43 100

72 37.8 23.0 34.6#



#29

Tetrahydrofuran

Concen: 0.421 ug/l

RT: 5.15 min Scan# 655

Delta R.T. 0.02 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

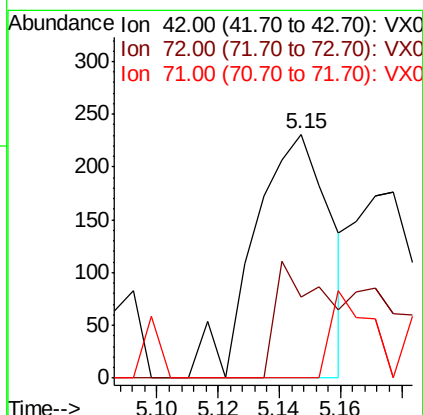
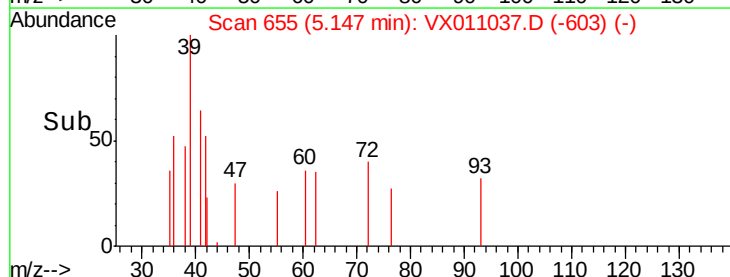
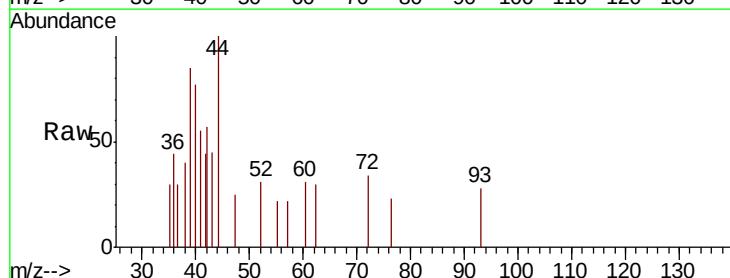
Tgt Ion: 42 Resp: 399

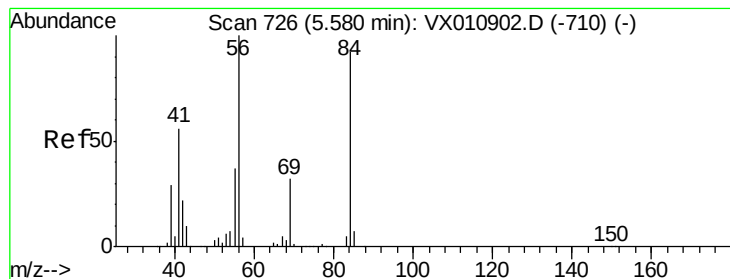
Ion Ratio Lower Upper

42 100

72 31.1 39.8 59.8#

71 18.0 37.0 55.4#





#31

Cyclohexane

Concen: 1.314 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.08 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0619-9002

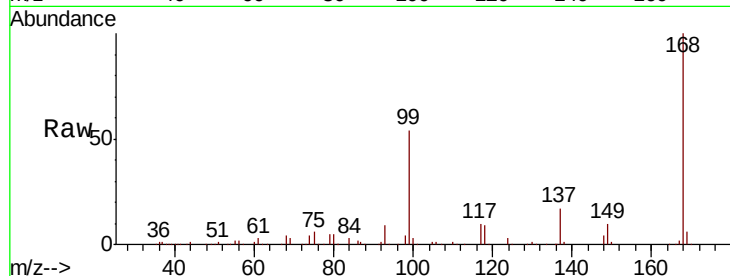
Tot Ion: 56 Resp: 4115

Ion Ratio Lower Upper

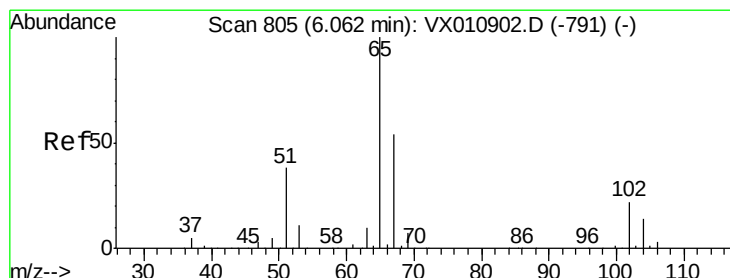
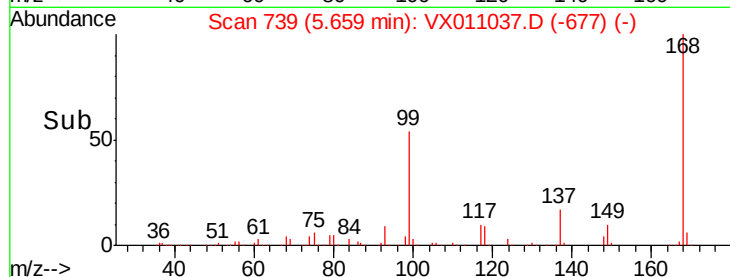
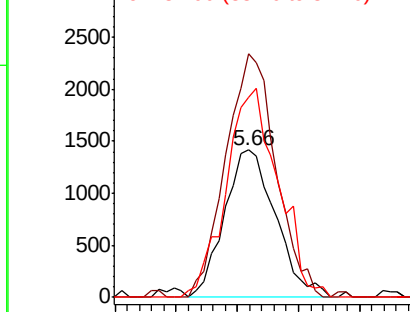
56 100

69 165.4 25.8 38.8#

84 135.9 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: 51.249 ug/l

RT: 6.06 min Scan# 805

Delta R.T. -0.00 min

Lab File: VX011037.D

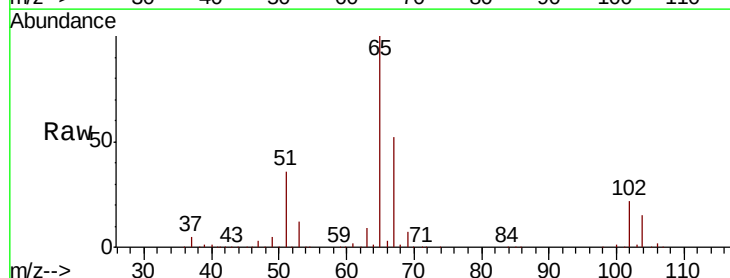
Acq: 22 Jul 2019 17:46

Tgt Ion: 65 Resp: 118204

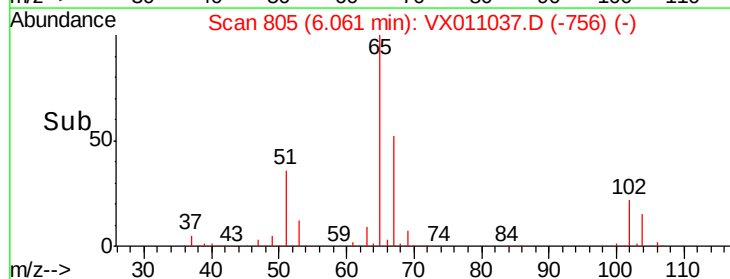
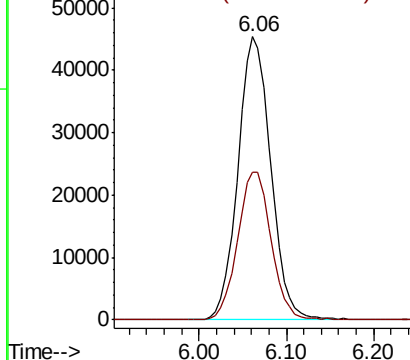
Ion Ratio Lower Upper

65 100

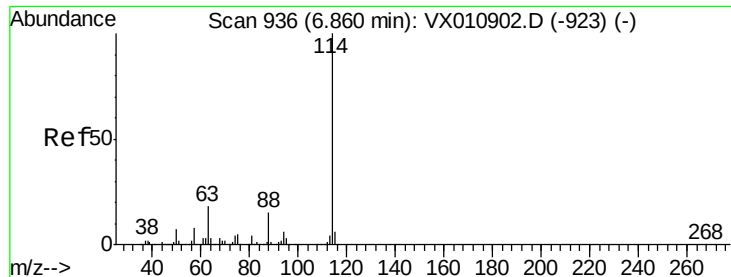
67 53.5 0.0 107.8



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



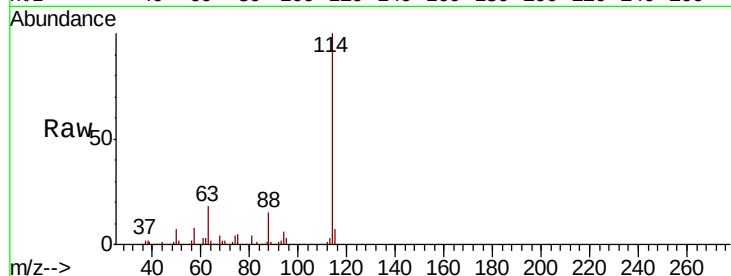




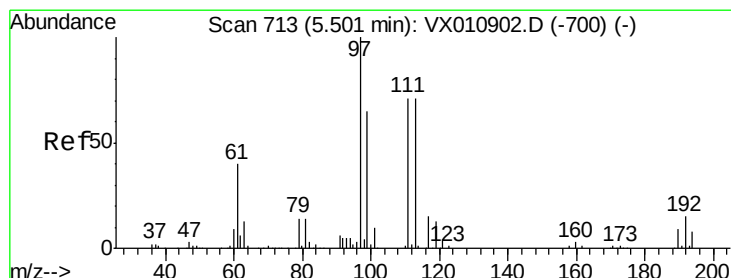
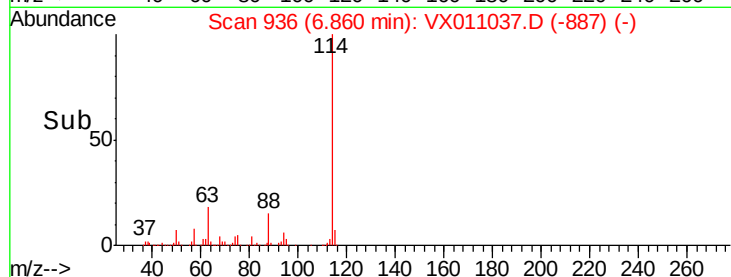
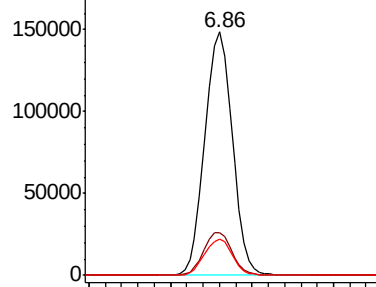
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 6.86 min Scan# 936  
Delta R.T. -0.00 min  
Lab File: VX011037.D  
Acq: 22 Jul 2019 17:46

Instrument :  
MSVOA\_X  
ClientSampleId :  
SU19-MSW0619-9002

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 17.6  | 0.0   | 35.6  |
| 88      | 14.8  | 0.0   | 29.8  |

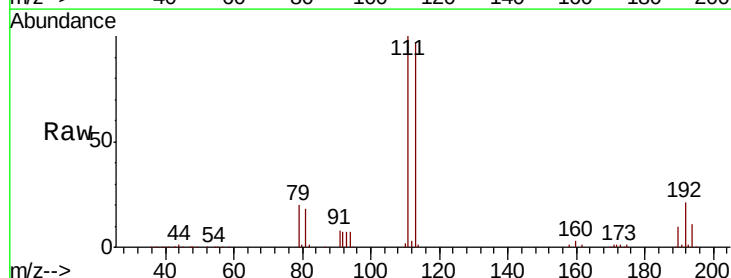


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): VX0  
Ion 87.90 (87.60 to 88.60): VX0

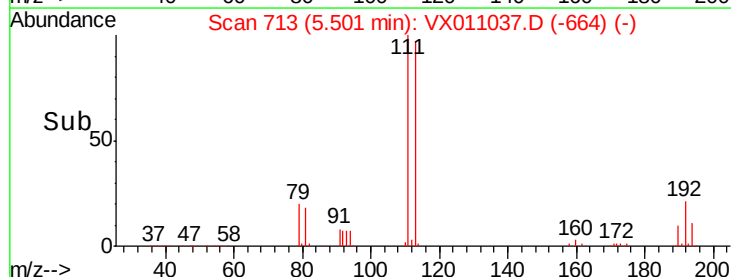
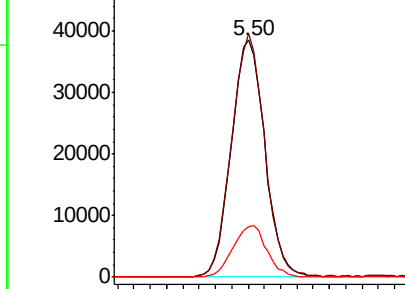


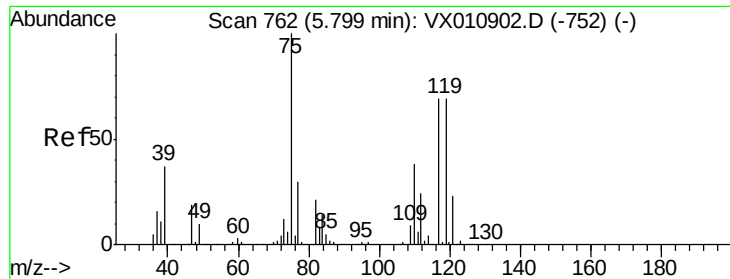
#35  
Dibromofluoromethane  
Concen: 49.602 ug/l  
RT: 5.50 min Scan# 713  
Delta R.T. -0.00 min  
Lab File: VX011037.D  
Acq: 22 Jul 2019 17:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 100.8 | 82.3  | 123.5 |
| 192     | 21.7  | 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

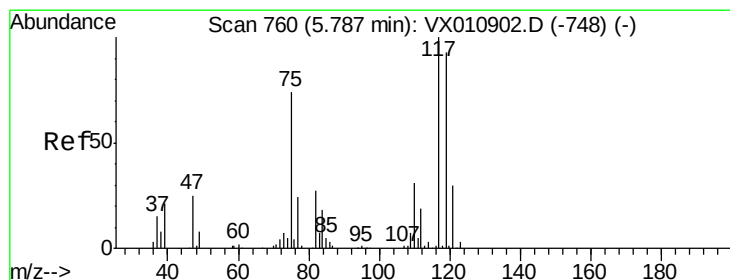
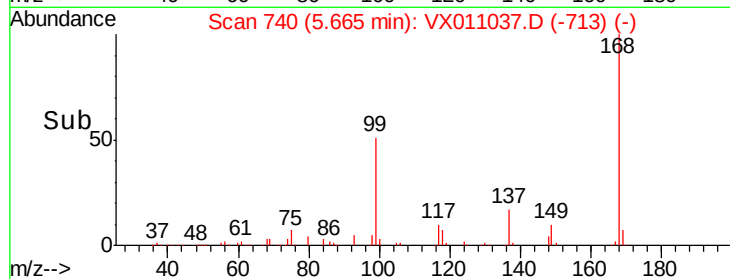
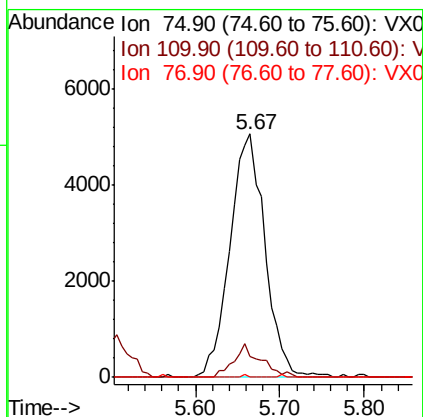
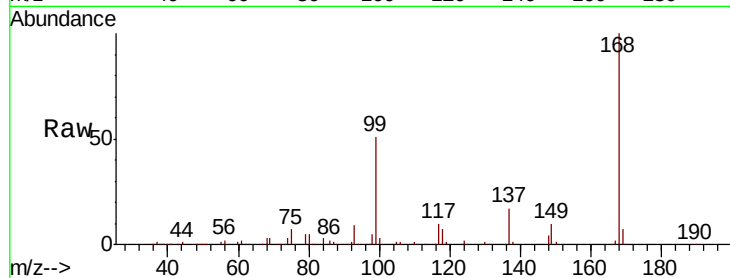




#36  
 1,1-Dichloropropene  
 Concen: 4.995 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.13 min  
 Lab File: VX011037.D  
 Acq: 22 Jul 2019 17:46

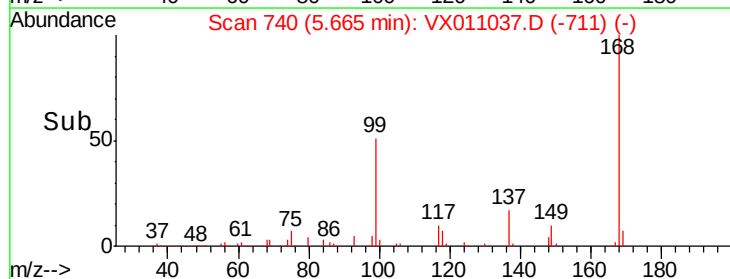
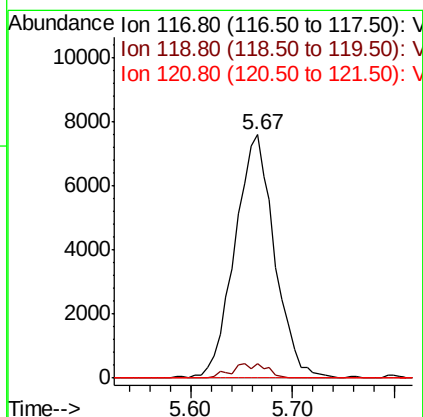
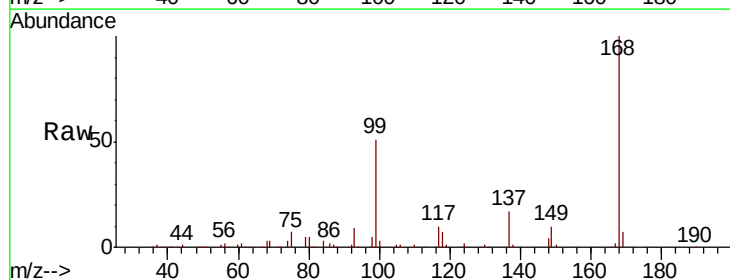
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SU19-MSW0619-9002

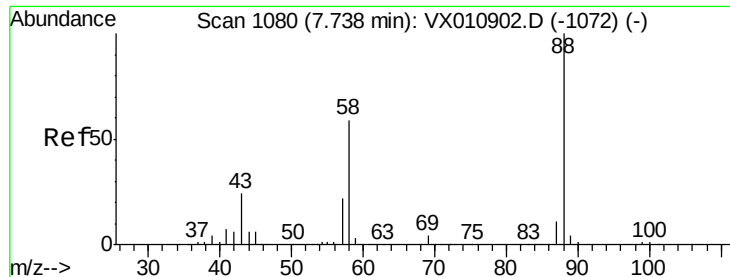
| Tot Ion   | 75   | Resp  | 14304 |
|-----------|------|-------|-------|
| Ion Ratio | 100  | Lower | Upper |
| 110       | 10.7 | 19.9  | 59.7# |
| 77        | 0.2  | 25.0  | 37.4# |



#38  
 Carbon Tetrachloride  
 Concen: 6.872 ug/l  
 RT: 5.67 min Scan# 740  
 Delta R.T. -0.12 min  
 Lab File: VX011037.D  
 Acq: 22 Jul 2019 17:46

| Tgt Ion                                              | 117 | Resp  | 20508  |
|------------------------------------------------------|-----|-------|--------|
| Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td> | 100 | Lower | Upper  |
| 119                                                  | 5.8 | 74.2  | 111.2# |
| 121                                                  | 0.0 | 24.2  | 36.2#  |

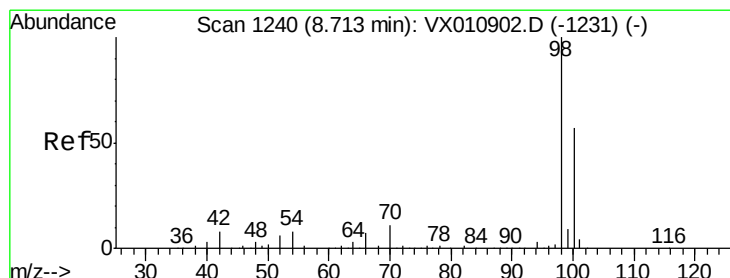
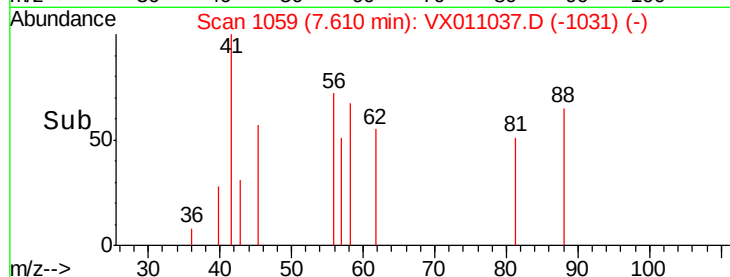
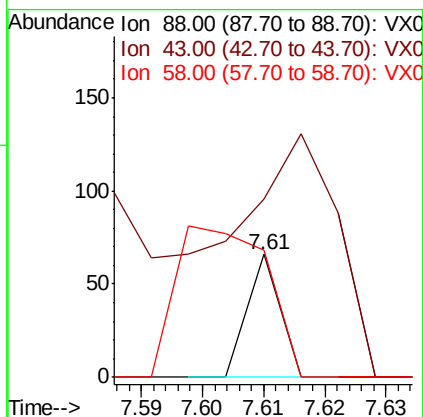
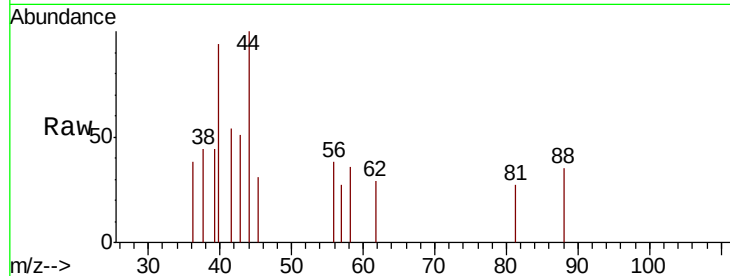




#49  
1,4-Dioxane  
Concen: 0.365 ug/l  
RT: 7.61 min Scan# 1059  
Delta R.T. -0.13 min  
Lab File: VX011037.D  
Acq: 22 Jul 2019 17:46

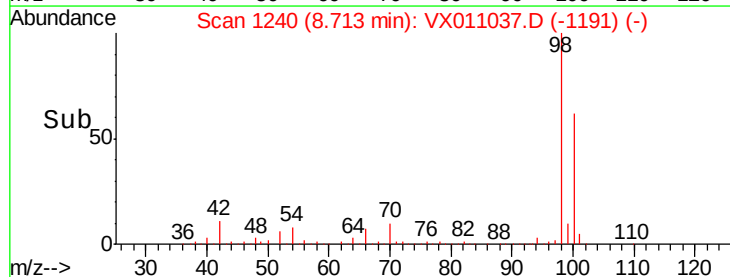
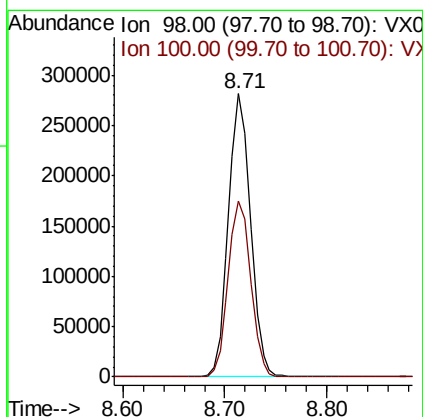
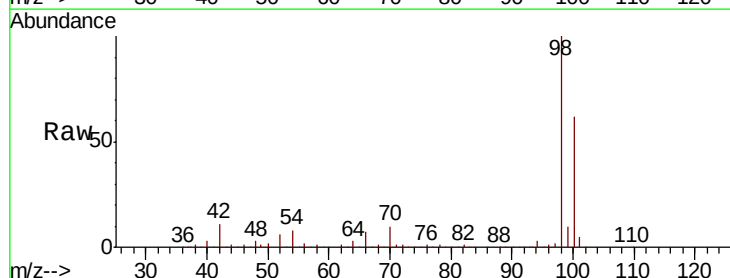
Instrument :  
MSVOA\_X  
ClientSampleId :  
SU19-MSW0619-9002

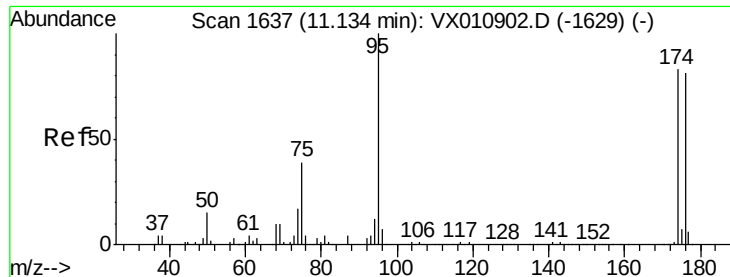
Tot Ion: 88 Resp: 24  
Ion Ratio Lower Upper  
88 100  
43 591.7 22.9 34.3#  
58 345.8 49.8 74.8#



#50  
Toluene-d8  
Concen: 50.950 ug/l  
RT: 8.71 min Scan# 1240  
Delta R.T. -0.00 min  
Lab File: VX011037.D  
Acq: 22 Jul 2019 17:46

Tgt Ion: 98 Resp: 422898  
Ion Ratio Lower Upper  
98 100  
100 63.7 50.6 75.8





#62

4-Bromofluorobenzene

Concen: 50.163 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.00 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0619-9002

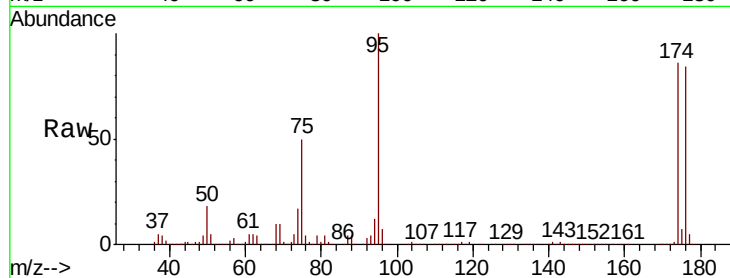
Tot Ion: 95 Resp: 153043

Ion Ratio Lower Upper

95 100

174 90.9 0.0 180.6

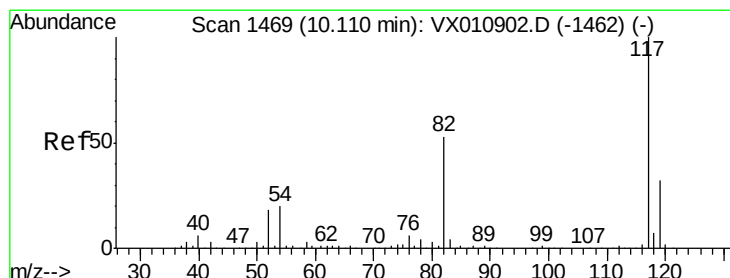
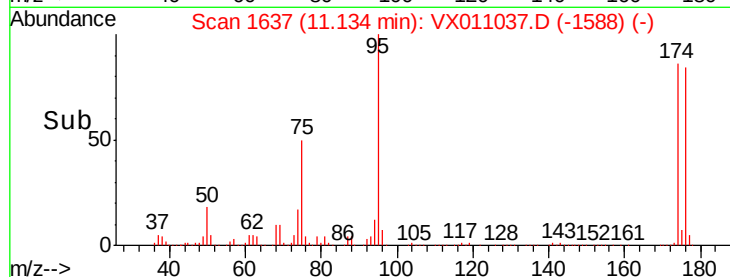
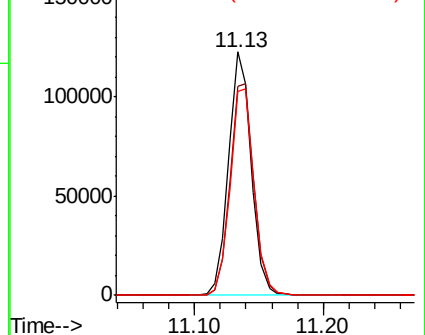
176 88.9 0.0 173.8



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1469

Delta R.T. -0.00 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

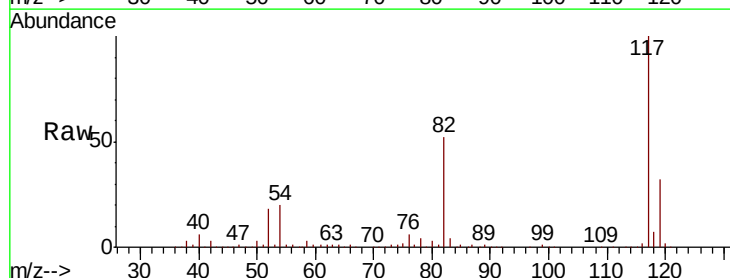
Tgt Ion: 117 Resp: 333053

Ion Ratio Lower Upper

117 100

82 51.5 42.6 63.8

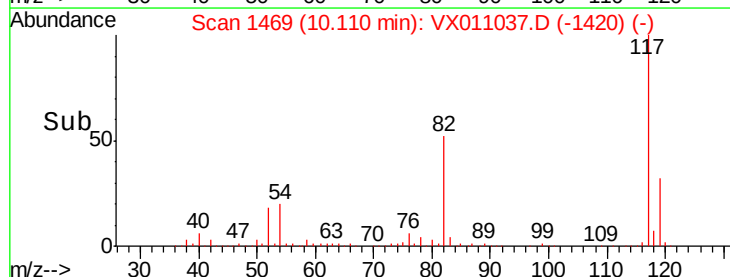
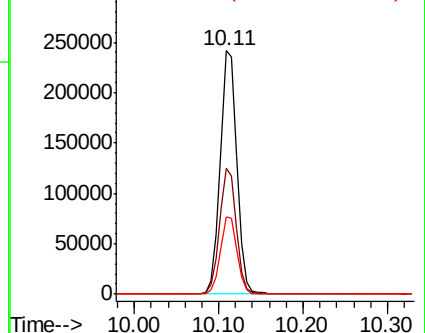
119 31.9 25.9 38.9

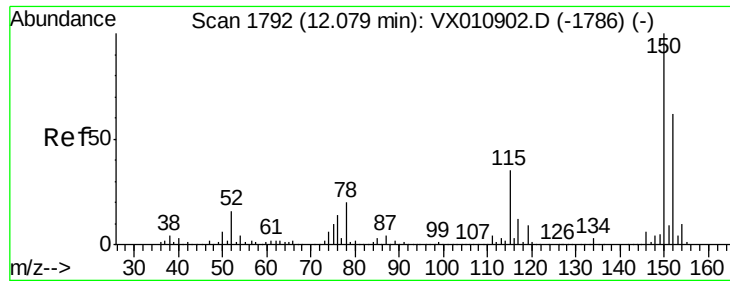


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V



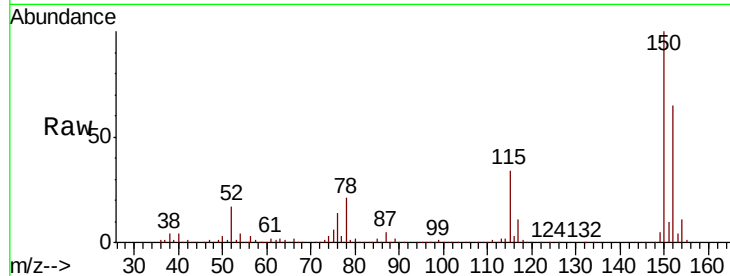


#72

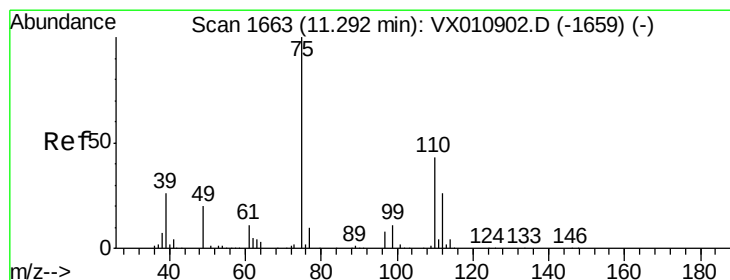
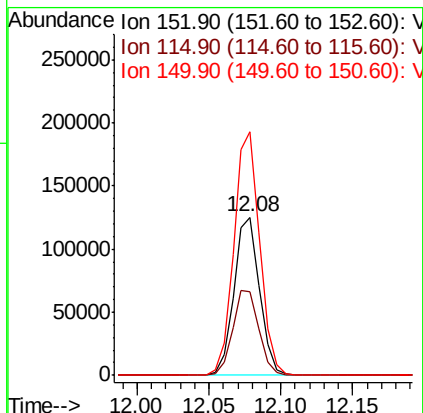
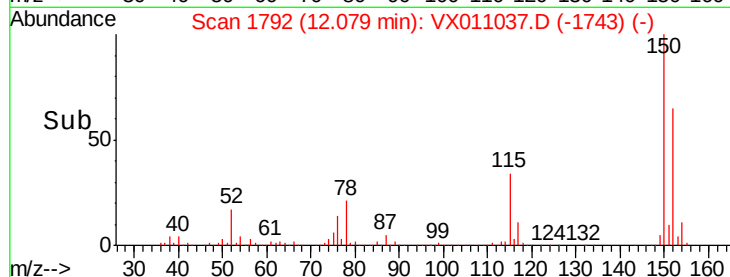
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.08 min Scan# 1792  
Delta R.T. -0.00 min  
Lab File: VX011037.D  
Acq: 22 Jul 2019 17:46

Instrument :  
MSVOA\_X  
ClientSampleId :  
SU19-MSW0619-9002

Tot Ion:152 Resp: 155727  
Ion Ratio Lower Upper  
152 100  
115 55.1 39.7 119.1  
150 155.1 0.0 345.6



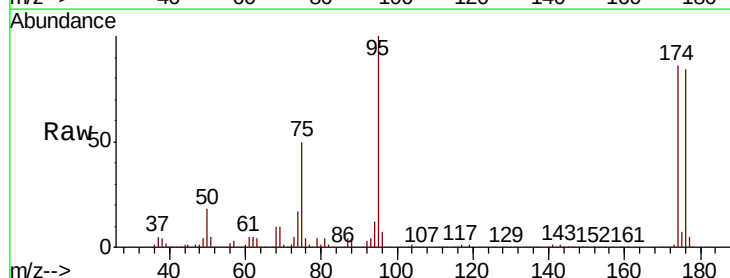
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



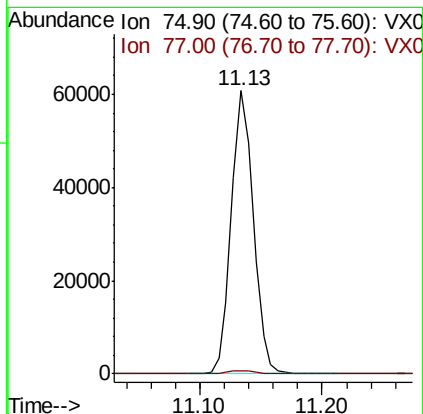
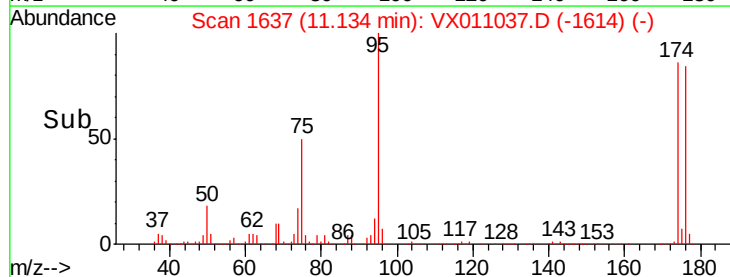
#76

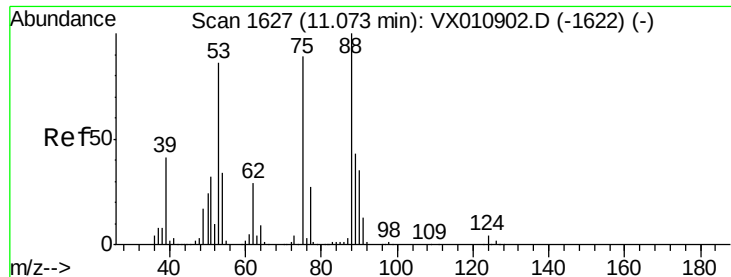
1,2,3-Trichloropropane  
Concen: 26.971 ug/l  
RT: 11.13 min Scan# 1637  
Delta R.T. -0.16 min  
Lab File: VX011037.D  
Acq: 22 Jul 2019 17:46

Tgt Ion: 75 Resp: 75793  
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: 66.873 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011037.D

Acq: 22 Jul 2019 17:46

Instrument :

MSVOA\_X

ClientSampleId :

SU19-MSW0619-9002

Tot Ion: 75 Resp: 75793

Ion Ratio Lower Upper

75 100

53 0.0 76.7 115.1#

89 0.1 38.5 57.7#

